

CONQUEST OF THE SEAS

The History and Adventure of Sea and Ships

CONQUEST OF THE SEAS

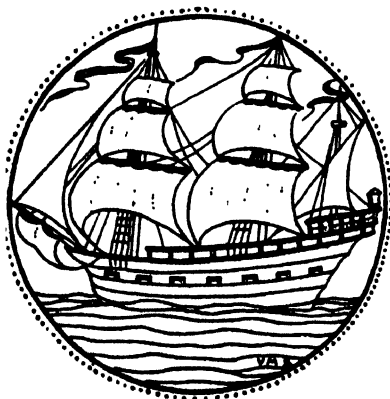
*The History and Adventure
of Sea and Ships*

BY

FRANK C. BOWEN

*Author of "America Sails the Seas",
"The Golden Age of Sail", etc.*

Profusely illustrated



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FOREWORD

The aim of this book is to trace the history of the Sea and of ships through the ages, particularly the part played by the Anglo-Saxons in the conquest of the seas. The maritime history of the English speaking peoples is not a matter of chance or of casual growth; it is the logical outcome of circumstance and persistent effort. The sea is their heritage, but is a heritage that must be guarded jealously and studied carefully in all its phases. This can be done only through the history of our forefathers, and it is this history that is spread before the reader.

Comparatively few, except practical seamen, can visualize the old ships as they sailed and the old actions as they were fought. For this reason every effort has been made to illustrate the story in all its aspects, and this has been rendered possible only through the kindness and enthusiasm of Mr. A. G. H. Macpherson, who has put the whole of his famous collection of maritime prints at the disposal of the publishers. Mr. Macpherson has been an enthusiastic student of all nautical affairs since boyhood, and has succeeded in getting together the finest collection of maritime prints in the world. No public collection or gallery has achieved a tithe of what he has, and the author and publishers desire to make full acknowledgment of his courtesy in allowing them access to his unique accumulation of pictorial records.

This book is, in effect, a companion volume to *America Sails the Seas*, which traced the maritime history of America from the time of Columbus' first voyage to the early days of the steamship. For that reason, no mention of the American scene occurs in these pages.

The Publishers.

CHAPTER I

The Discovery of Britain

The Dawn of Sea History

The earliest dawn of sea history is obvious and has often been pictured. The prehistoric savage on his log in a river—probably unwillingly—discovering that a fair wind will carry him along and transport him from one bank to the other; the theory is so natural that it is impossible to doubt it. Whether that river was the Euphrates, or one of the great Indian streams, or any other waterway, is beyond anything more than the vaguest conjecture and can safely be left at that. This history proposes to deal with the history of the sea, principally as it has affected the Anglo-Saxon races and this country in particular; and, therefore, although the East is certainly the cradle of navigation, and although it must be admitted that it is impossible to get a proper conception of sea power and all that it means without first making a close study of the history of the Mediterranean peoples on the water, it is only necessary to deal with them where they came into touch with Britain. This misses a portion of the World's Sea Story that is extraordinarily interesting, but which would require many volumes to itself.

As far as it concerns us the dawn of sea history is the time of the Phoenicians, for it was almost certainly they that first brought shipping to us. They came in search of gold only, and like every other power that is founded with that idea alone they declined and fell. But their endeavours brought the beginning of many things which made for civilisation, and the world owes them a lot. Unfortunately the Phoenicians were not historians, possibly because they were always in terror of divulging the secrets of their trade, and we know far less about them than we do about many peoples who were far less deserving, but the scraps that we possess make fascinating reading.

Pytheas.

The Pytheas mentioned above was a celebrated Greek navigator and geographer, hailing from Marseilles. He lived in the time of Alexander the Great but was far in advance of his day in knowledge, for he appears to have been a first-class astronomer and also one of the first to make observations for the determination of latitude. He certainly fixed the latitude of Marseilles with remarkable accuracy, and also realised the connection of the moon and the tides and pointed out their characteristics. It is believed to have been in the year 325 B.C.

that he made his famous voyage of discovery along the west coast of Europe, during which he visited England, Scotland, the Scottish Islands, and Thule. Many regard this as the north coast of Scotland, but it is far more likely to be northern Norway, for he undoubtedly approached the Arctic circle. He also explored the northern coast of Germany as far east as Jutland.

CHAPTER II

Before the Conquest

The Veneti.

According to some authorities the real fathers of the British Navy were the Veneti rather than the Vikings—a war-like tribe who lived round about the modern Morbihan in Brittany, round the mouth of the Loire. They had long been in communication with the Britons, and when they opposed Cæsar it was with the assistance of a British fleet. The Veneti had copied their ships originally from those of the Carthaginians, but they had adapted them to their own requirements and Cæsar was full of admiration for them. They were somewhat flatter in the floor than the Romans' in order to adapt them better for work in the shallows, and for taking the ground even on that inhospitable shore without sustaining any great damage. There was a very considerable sheer both forward and aft, and the hulls were very stoutly built of oak. They were iron fastened, had chains for their cables instead of hemp, and although they had oars they depended principally on their sails of tanned hide. Their decks were a foot thick, and so strongly were they constructed that they resisted all the efforts of the Romans to ram them, which more than compensated for the handicap that they had in their unhandiness. Even when the Romans built turrets they found that they could not reach their decks without difficulty, and finally the victory was gained by the Romans fitting hooked knives on poles and cutting their standing rigging. They appear, however, to have inspired in Cæsar a good deal of admiration for their ability.

Cæsar's First Expedition.

Having conquered Gaul, Julius Cæsar found time to consider his next operations and, unfortunately, the Britons had reminded him of their existence by the assistance they rendered the Veneti, with the result that he soon determined to punish them. Two legions were told off for the purpose in the year 55 B.C., and a reconnoitring expedition of light craft was sent ahead to find out good landing places. Cæsar followed with his troops as soon as he got the required information. The embarkation was done by night, and the point on the French coast is believed to be the modern Wyssant Bay. At ten o'clock next morning he found himself under high cliffs which were held in force by the Britons with only a portion of his command at hand. From his descrip-

tion it would appear that his first land-fall was between Dover and the South Foreland. He anchored until the whole of his fleet had arrived, and then made north-east with wind and tide. His actual landing-place was probably the present site of Walmer Castle, where the coast was ideal for his purpose but where the defenders had already arrived in force. He then discovered that in his ignorance of shipping matters his transports had far too great a draught. The heavily-armed legionaries had to jump into deep water, where many of them were drowned while the Britons harassed them with their cavalry. Cæsar had with him, however, some light galleys, which attacked the British flank with slings and catapults until eventually they wavered and gave the Romans a chance of landing. While he was encamped near the shore a storm destroyed a number of the transports that he had anchored too close inshore. The Britons took advantage of this disaster to attack him, but they were beaten off, and soon after Cæsar returned to Gaul.

Cæsar's Second Expedition.

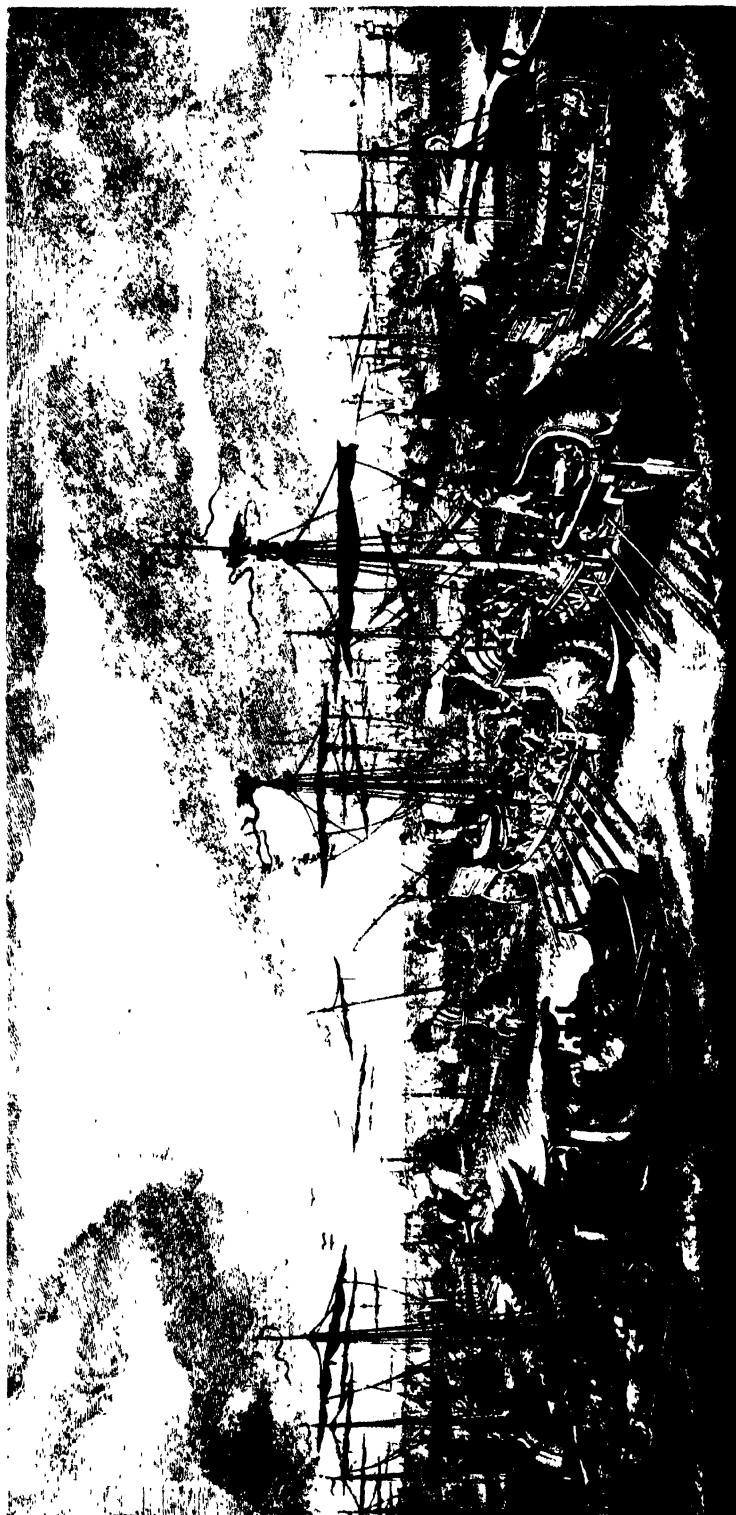
Although he had taken with him a number of British hostages Cæsar was not by any means satisfied with the punishment that he had meted out to the Islanders, and in the following year he collected his forces for another expedition. He learned from his mistakes, and designed a specially shallow draught transport which took his troops well inshore and could then be dragged up on the beach. In these he embarked two thousand cavalry and five legions, but choosing his time better on this occasion he sailed at sunset. His idea was to descend on the coast at dawn, but the breeze died down and the tide appears to have carried his fleet, which consisted of eight hundred sail in all, practically to the North Foreland, so that the rowers had hard work to get back to Walmer by noon. The Britons retired inland and were defeated at about the spot where Sandwich stands to-day, but while he was ashore another storm wrecked a number of his ships and Cæsar hauled the rest right up into his camp. At the end of his land operations, which do not enter into the sphere of this book, Cæsar was lucky to get his overcrowded transports back to Gaul without mishap. It is significant to notice that in neither expedition did the Britons make any effort at sea.

The Permanent Roman Occupation.

The Roman invasion proper, which led to Britain being occupied by her legions for some four hundred years, was begun in the reign of the Emperor Claudius in A.D. 43. The transport arrangements were based on Cæsar's, but there is nothing in the invasion itself which calls for comment, except that under Agricola the Roman galleys sailed right round England and Scotland, and got a very tolerable idea of the features of the Islands.

The Romans at Sea.

Throughout the whole of their history the Romans were inclined to be soldiers at sea far rather than sailors, just as the Spaniards and Germans were in later days. Their ships were fitted with slings and



(Macpherson Collection)

VICTORY OF THE ROMANS OVER THE CARTHAGINIANS, B.C. 236

This engraving, although anachronistic in many ways and liable to be corrected in light of more modern knowledge, gives some rough idea of the ancient Mediterranean galleys and shows the essential differences between the men-of-war and the merchantmen



THE LANDING OF CÆSAR IN ENGLAND

Caesar is depicted as standing in a ram-bowed war galley, to be compared with the roughly-built shallow-draft boats constructed for the transport of the expedition



THE BATTLE OF SLUYS, 1310

*Sluys was essentially a soldiers' battle fought in ships, but it had a very appreciable effect on the history of the sea.
(From an engraving lent by Mr T H Parker)*



(Macpherson Collection)

WARWICK'S ACTION WITH THE FRENCH

Had he lived later, Warwick the Kingmaker would have made an excellent Gentleman Adventurer, for he understood the sea, and as Captain of Calais kept the Straits tolerably free of French corsairs. The engraving reproduced is from a drawing by John Rous, c. 1485, now preserved in the Department of Manuscripts, British Museum.

even heavy engines for throwing missiles, but they much preferred to get to grips and board, when they could get the utmost value out of their short swords, in the use of which they knew that they could not be approached. If they could not do this they relied very largely on throwing spears, and the whole routine of their fleet was entirely military. Perhaps this accounts for their eagerness to build a number of strongholds along the shores of all the countries in their possession.

The Evacuation.

How Roman Rule in Britain declined and finally finished, owing to the decadence of the Empire, is well known and need not be mentioned here, but before the end Lupicimus, one of Julian's lieutenants, took vigorous action at sea, and in his time repressed the piracy of the Picts and Scots. Maximus also used his Navy, but normally the Roman patrol flotillas, although they existed, made very poor use of their opportunities, and towards the end of the occupation they only occasionally put to sea. As far as the Britons of and around the capital were concerned the land invasions of the Scots were a matter of very small weight, but the excursions of their pirates were a very different matter and it was against them that they constantly prayed the Romans for protection. The fact that they could not be given it was the last straw, and when they were finally told to defend themselves they rose and evicted the last handful of officials that had been left in the country. They were free, but they were totally unfit to protect themselves against the vigorous Northmen, and they soon fell a prey to the pirates, firstly to those from Scotland and then to the Vikings who later came to rule the Kingdom.

The Vikings.

Originally the Vikings were the men of the Viks, or bays, but before very long the term came to mean a Norse sea-rover, which was then considered to be a very correct and aristocratic profession. Among the Norsemen manhood was everything, and the regular method by which a young man could prove his worth was by at least one piratical expedition. In Iceland it was the only profession for a gentleman, and there was no limiting the number of cruises to one or two. Their ancestors are believed originally to have come from Asia, probably from Bactria, near the Source of the River Oxus. When they migrated is not certain, but the Viking age which concerns the history of shipping begins about the year 789, when the first reported pirate expedition put to sea. These piratical expeditions were all on a similar plan. First of all there was a reconnaissance in some force (three ships when the Dorset coast was first raided in 789), followed by a bigger expedition which took possession of some convenient island preferably at the mouth of a river, which could be used as a base and arsenal. After that their operations were on land, and when they had fought and slaughtered their way to power they would settle down and assimilate with the people

who remained in a manner that was remarkable in such cruel warriors. After the first raid on Britain and a few similar excursions in the following years they left England alone for a time and confined themselves to Ireland, the West of Scotland, and the Isle of Man. In 835 they captured and fortified the Isle of Sheppey, then Thanet, and in 838 began their first really serious invasion of Britain. The "Great Army" landed in 865, and it was thirteen years later that Alfred forced the greater part of them to accept his terms, the malcontents invading France, settling in Normandy, and in due course conquering Britain.

The Saxon Navy.

King Alfred the Great is generally regarded as being the founder of the Saxon Navy, but as a matter of fact his predecessor, King Athelstan, did much before his time. Although the Norsemen gave Britain a very bad time with their piratical raids, it must not be forgotten that it was entirely due to them that we became a sea nation, and the Saxons, who followed their King in the preservation of law and order, were only pirates who had settled down to a rather more peaceful life. King Athelstan and Alderman Elchere deserve to be well remembered for having fought what appears to be the first purely English sea fight when they collected a fleet and descended on an invading force that were despoiling the town of Sandwich in Kent. A large army was destroyed on shore, nine of the ships were captured, and the remainder of what appears to have been a very considerable fleet were dispersed. It seems curious that, although the Saxons had been pirates themselves, this was the first occasion on which they used their ships for attacking, and it was not until King Alfred organised his fleet completely that they really tackled their enemies on the water. King Alfred's brother was Saint Neot, who, according to the Anglo-Saxon Chronicle, fought on shipboard in the year 851, very probably in this same action. It may very easily have been on Saint Neot's advice, for it is known that he had very considerable influence over his brother, that Alfred built his fleet in the first place, yet he is scarcely remembered in this country.

King Alfred's Fleet.

The British have many things for which they should be grateful to the memory of King Alfred, but for none more than his organisation of the fleet into a permanent fighting force. The Romans kept some sort of a patrol in the Channel for the purpose of maintaining communications with Gaul, but immediately they had gone this was stopped. Alfred was a stout fighter, and also a man of scientific attainments far in advance of his time. The Saxon Chronicle records that he himself devised new types of ships, making them fully twice as long as those that were generally used in his day. Some of them had sixty oars and some more, but according to other authorities the fleet also included ships of forty oars. They were fast and seaworthy—the historian makes particular note of the fact that they were steadier than their contemporaries, which was no doubt a very gratifying feature to the lands-

men who were pressed into the service. Details of their lines have not come down to us, but it appears that they were quite distinct from both the Frisian and the Danish types. The King is reported to have seasoned the materials of his ships, whereas before his time green timber was used on account of the difficulty of bending seasoned wood before the use of steam was thought of. He gave strict orders that the Norsemen were to be regarded as pirates and that no quarter was to be given them, which was only giving them a dose of their own medicine. Towards the end of his reign a handful of Danish Esks attempted to ravage the South Coast, but were soundly beaten by Alfred's long ships and the lesson was a salutary one. It did not, however, prevent Hastings attempting his invasion, which kept Alfred's forces busy for something like four years.

CHAPTER III

The Norman Conquerors and Their Successors

The Vikings and Normandy.

In Britain it is usual to regard the Norman invasion as being essentially a French movement, whereas it was really almost civil war. The invaders spoke a French of sorts and had many French ways, but they were little more French than English. The beginnings of the Normans were in the days of King Alfred, when Norse invaders got short shrift and soon learned to leave England alone. For a time they ruled themselves in the north country in something like autonomy, but this soon palled, and as the English power gradually extended they decided to seek happier hunting grounds. Having embarked, their natural course was south, and so they came to land and finally to establish themselves in Normandy, where they dispossessed the French rulers, but in true Norse fashion soon became identified with the soil and adopted its ways. This was only a century and a half before the invasion, after they had been kept out of Spain by the war-like Moors, so that it was really a Viking raid on a large scale rather than a French invasion, which helps us to understand many things. Canute and William the Norman were alike in many particulars, and should be studied in parallel far more than they are as a general rule.

The Origin of the Cinque Ports.

Some people believe that the organisation of the Cinque Ports dates from some time before the Conquest, but it was certainly not until after this event that their services became of national importance. King William realised the necessity of maintaining the channels without having the means of doing it, and accordingly they were granted certain privileges in return for their undertaking to place fifty-seven ships at the service of the Crown for fifteen days free of all costs, at the end of which time the King continued the charter at the customary rates. The Cinque Ports originally consisted of Hastings, Romney, Hythe, Dover, and Sandwich, but afterwards the ancient towns of Winchelsea and Rye were added to them, with precisely similar privileges and duties. Afterwards there were a number of other places, both of corporate and non-corporate rank, which held a subordinate position, the most distant being Brightlingsea in Essex. Among other privileges was the exemption from taxes, the right to try criminal and civil cases within their liberties,

the right to seize all flotsam and jetsam and lost property or cattle that was not claimed within a certain time, and also the right to impose taxes and make by-laws. In spite of the fact that they have always claimed to be exempt from the jurisdiction of the Admiral of England, this is open to a good deal of question. It will, of course, be seen that although the services of the Cinque Ports were of infinite use to the Sovereign they certainly hindered the growth of the Navy very seriously indeed, while on more than one occasion their barons and men used very threatening language to the King in demanding rights and privileges, and they were always inclined to a good deal of piracy at the expense, not only of foreigners but of neighbouring English towns. Their real importance ended with the thirteenth century.

The White Ship.

The story of the wreck of the White Ship with the only legitimate son of Henry I on board in the year 1120 has been assailed in its details as fable, but there is nothing inherently improbable in the story and it is worth repeating in its entirety. It may or may not be the fact that she was built specially for Prince William, but there is little doubt that she was commanded by one Thomas FitzStephen, either the son or the grandson of the master of the *Mora* when William I invaded England. *La Blanche Nef* was one of the crack ships of her day apparently, pulling fifty oars, and FitzStephen begged the king, who was returning with his court from Barfleur to England, to travel in her. Prince Henry and a number of his natural relatives used her instead and started considerably after the King's ship, but appear to have made a sporting event of it and to have plied all hands with wine to urge them to race her. In cutting too close inshore and trusting to the moonlight her people failed to see the reef in the Ras de Catteville and stove in her port side as she scraped along it. The fact that she was crowded with three hundred people in all, most of them in a very fuddled state, added to the panic, but they kept their heads enough to launch their only boat and to put the Prince safely into it. At the age of eighteen he appears to have had all his family's gallantry, and insisted on putting back to rescue his half-sister. So many people attempted to clamber into the frail craft that she was speedily swamped, and the only survivor was the butcher, who managed to float ashore on a spar more dead than alive.

The English Invasion of Ireland.

Ireland had long been the object of various invasions, principally by the Norsemen, who came in their flat-bottomed galleys that could go far up the estuaries, and were then beached, drawn above high-water mark, and so formed a mobile base for the invaders. The Norse "Fjord" is still to be found in many Irish names, such as Carlingford, Waterford and the like, but it was Henry II who really conquered Ireland, being brought in by the King of Leinster, who had been deposed for his tyranny. Henry was busy in France at the time, but he

encouraged an expedition which was under the command of Richard de Clare, Earl of Pembroke, later to be known as Strong Bow. Robert FitzStephen was his right-hand man. These nobles collected a fleet in Wales and led two expeditions in 1169 and 1170, until finally they became so powerful that Henry himself crossed in 1172.

King John.

King John should be remembered with a certain amount of gratitude by all connected with shipping on account of his reign being the first in which there were signs of a real naval organisation. The King appointed William of Wrotham, a cleric, to be "Keeper of the King's Ships." This phrase passed through various changes and mutilations in the history of the fleet, but its direct descendant is now the Secretary of the Admiralty. Occasionally a merchant was appointed, and at other times a local official, who became a mere messenger, bargaining in various ports for stores or recovering deserters. John's French adventures, disastrous as they were, called for a certain amount of shipping for transport. In this reign the ships of the Cinque Ports were employed to cut off the French King's convoys in the Channel. It was in his reign also that Eustace the Monk, a French or Flemish rover, flourished. After a very short time in Holy Orders, he inherited a certain amount of property which he invested in shipping and set out as an adventurer with a choice company. He was for some time in King John's service, but his master was by no means satisfied with what happened to his prizes, and orders were given that he was to be arrested should he venture to show himself in an English port. This caused him to transfer his services to the French, and he was in charge of their sea forces in the following campaigns.

Armed Merchant Ships.

All through the long period of the Norman and Angevin Kings and the struggle with France the greater part of the fighting at sea had been done by armed merchant ships, of which considerable mention has already been made. Their history is a fascinatingly interesting one, but their importance to sea history lies just as much in the handicap to peaceful shipping inflicted by their constant and often unnecessary requisitioning as it does in their feats of arms, and therefore they are dealt with more fully in another place.

CHAPTER IV

The French Wars

The French Wars.

The period covered by the great French Wars was an epoch of tremendous importance to the Royal Navy, for it marked its first real ability to carry out the functions of a Navy. To begin with, it was only used as a means of transport and of protecting the passage of an army. The ships lacked the sea-keeping qualities essential for a man-of-war. As the period progressed, however, all this was changed, a proper realisation of the functions of the fleet being forced upon the country by the circumstances of the time, and the improvement in naval architecture and seamanship permitted them to be carried into effect.

The "Christopher" and the "Edward."

One of the first of our fights against the big odds that is specifically mentioned in history occurred in the year 1338 when the King's ships *Christopher* and *Edward*, with three smaller ships, were returning from Flanders with valuable cargo. While on passage they met the same French and Genoese Fleet that had sacked Portsmouth, carrying some forty thousand soldiers and having just completed a raid on Hastings and other towns on the South Coast. The French fleet consisted of over fifty vessels, and in men they outnumbered the English by a hundred to one, yet the latter fought through the day and night in most gallant fashion and inflicted very heavy casualties before they were overcome. The two big ships went to the French Navy, but they did not remain on their lists very long.

The Battle of Sluys.

In September, 1339, the French collected a huge naval force at Sluys to cut King Edward's communications, but putting to sea early in October they were caught on a lee shore and nearly half were lost. There remained, however, sufficient to form a very great menace to England, and every preparation was made to collect a naval force to counter it. Finally, the King found himself in command of two hundred ships and as many men-at-arms and archers as his armada could accommodate. The King himself sailed in the cog *Thomas* and was joined off the coast of Flanders by a further fifty sail from the North, so that when the French were sighted at Sluys on June 23rd, 1340, there were some 250 sail under the King's command, which was rather a larger number

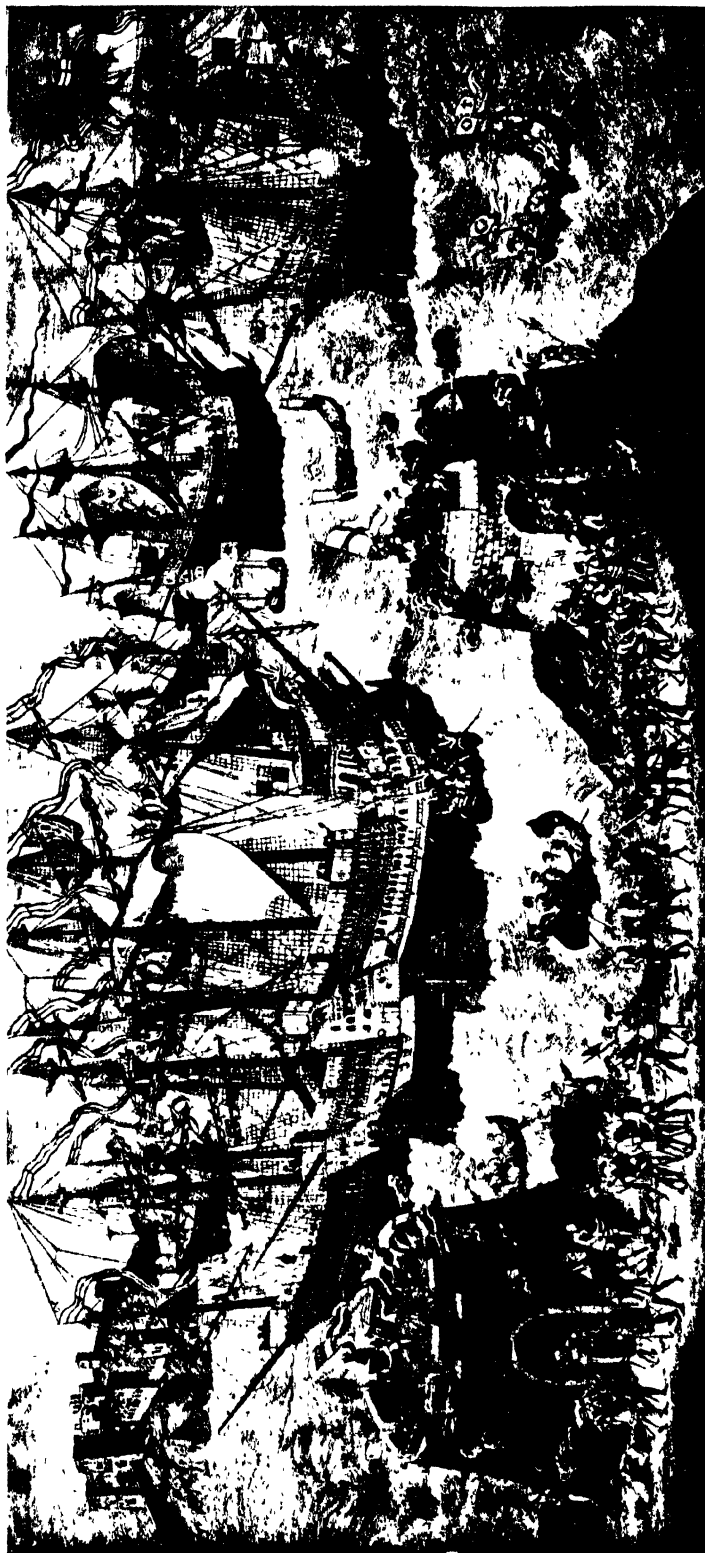
than the French. The captured *Christopher* was in the middle of the enemy's line, and was, of course, a particular target of the English. The action began soon after noon on the 24th, when Edward entered the port with his big ships filled with archers, accompanied by smaller vessels packed with men-at-arms for boarding. The reserve consisted of less valuable vessels carrying archers apparently to be employed at longer range. The French ships were generally big, but being deceived by the English move to gain the weather gage they cast off to pursue what they imagined to be an enemy retreating before the action had well begun, with the result that there was very soon a general mêlée over a big area. The principle of the attack was to board and engage in hand-to-hand fighting on deck, for it must be remembered that in those days the seamen were only there to take the soldiers from place to place as desired, and that the commands of the ships were all in the hands of knights. This method of attack crushed the French van, where one of the first prizes to be taken was the much coveted *Christopher*, which was immediately manned to attack the Genoese division. Instead of supporting their leaders the French reserve divisions attempted to make off, but they were soon surrounded, and in abandoning their ships many boats were swamped and nearly two thousand are reported by contemporary writers to have been drowned. A few big ships and a number of Genoese galleys and barges contrived to get away, but the bulk of the great fleet was completely annihilated, and it was some years before the French attempted to regain any command of the sea. Among the prisoners was Nicholas Behuchet, leader of the Portsmouth expedition, who was very rightly hanged at one of his own yard-arms. In spite of the appalling slaughter of the day, the English losses were comparatively light.

The First Blackbeard.

The division of Genoese galleys in the French fleet at the battle of Sluys was commanded by Edigo Boscanegra (Blackbeard), and it would rather appear that his heart was not as wholly in the fight as were those of his French employers. He escaped from the battle and contrived to hold off the English force that pursued him, but there is plenty of suggestion that he made away before the action was lost and that he was considering his own skin. He later took service with his fleet under the King of Castile, and while there offered his services to King Edward. In spite of the fact that he had been heavily concerned in the sacking of Portsmouth, the King was willing to treat with him, but the negotiations came to nothing.

Don Carlos de la Cerda.

Although perhaps his history would be better included among the pirates than the genuine fighting men, the action of this Spanish free-booter in December, 1349, had such important results that it is worth mentioning. On his way up to Sluys with a fleet of semi-cargo ships he captured several English wine vessels off Bordeaux in defiance of the



HENRY VIII'S DEPARTURE FROM DOVER,
MAY 31st, 1520

This expedition, on which the future of Europe was to depend, naturally started off with all possible pomp and ceremony. The King himself sailed in the Great Harry, the wonder ship of her day, but it will be seen from the picture that she differed in little but size from her contemporaries. The money wasted on decoration is noticeable. The above engraving, by J. Basire, is from a painting in His Majesty's collection at Hampton Court.

(Science Museum South Kensington)



(Macpherson Collection)

THE CAPTURE OF BRILL, 1572

The capture from the Spaniards of the town of Brill, in the Netherlands, by the semi-patriotic, semi-piratical "Beggars of the Sea," although only a few Englishmen participated, had the greatest influence on English sea history for over a century.



THE SPANISH ARMADA SAILING FROM FERROL, 12TH JULY, 1588

*After many discouraging delays the fleet finally got to sea on its ill-starred enterprise.
(From an etching by D. Low after Oswald W. Brierly, R.W.S. Lent by*

pus octo fongarū naviū Anno mxcii ab Hispania rege misarū ad Oceanum Belgicū infestandū quazū ne



Macpherson Collection)

ACTION

gloriam atq. Hollandorum virtute conquesta sunt et submersa cetera naafragio perire

[illegible]

ITS OF DOVER, 1603

One of the lessons of the repeated Dutch triumphs Spaniards was that galleys were not suitable for rough work such as was to be expected in the Straits of De the North Sea.



THE ARMADA AT CALAIS

Disorganised and demoralised, the Spanish ships anchor in a huddled mass off Calais, making an ideal target for the English fireships, which there turned the defeat into a rout.



SIR FRANCIS DRAKE

The character of Drake has been the subject of bitter controversy lately, and he has been variously described as a rank pirate and a glorious patriot. It is impossible to judge him by modern standards, but he did wonders for England at sea.

(Engraving by W. Holl from a painting now in the possession of Lord Seaton, Buckland Abbey, Devon)



(Macpherson Collection)

CADIZ, 1596

Showing the strength of the Spanish position when Essex attacked it. The bridge which was always regarded as the key to the position is shown on the right of the picture.

truce, and savagely murdered their entire crews. When he had loaded his cargoes he learnt that King Edward intended to obstruct his passage home, and therefore collected together all the armed men that he could hire in the Flemish towns. Meanwhile, Edward had collected a fleet and determined to lead it himself, accompanied by the Prince of Wales and a large number of other knights and soldiers, the whole fleet consisting of about fifty ships under the leadership of the cog *Thomas*, which had been Edward's flagship at Sluys, while the Spaniards had forty. The action took place off Winchelsea, and soon developed into a fierce hand-to-hand fight. In laying her alongside a big Spaniard the *Thomas's* people damaged her so severely that she began to sink and the enemy was only taken in time to transfer her people before the disaster, the unfortunate Spaniards being thrown overboard to a man. Owing to the superior build of the Spanish ships, and the fact that their piratical cruises had given them very good experience of this sort of fighting, things were not going any too well with the English, and it was only by taking an enemy ship that drowning was avoided on more than one occasion. According to Walsingham twenty-six Spanish ships were taken and others sunk, but the number varies in the different authorities. Edward III used the action many times when he wanted money from the merchants and claimed to be their special protector. This battle is known either as the Battle of Winchelsea or "*l'Espagnols sur Mer.*"

The Lord High Admiral.

The entire British Fleet had several times been put under one command, but always in a rather haphazard manner, and it was not until 1406 that the experiment was made of appointing a proper Lord High Admiral. This office has been maintained ever since, either by one person or by a commission, as is the case to-day with the Lords of the Admiralty. John Beaufort, Earl of Somerset, was the man selected. He was the natural son of John of Gaunt, but he did little for the fleet, being succeeded in 1407 by Edward, Earl of Kent, who was far more promising, but who was killed in 1408.

Henry IV's Position.

Henry IV was nominally at peace with France for the whole of his reign, but from the beginning relations were exceedingly strained—and when relations were strained in those days it was a constant case of raid and counter-raid; in fact, everything but open warfare. King Charles of France naturally felt the murder of his son-in-law, King Richard, deeply, and as Henry's claim was far from perfect, it was only natural that he should vent his displeasure by encouraging all the many movements against him. Henry understood a good deal of sea power, and as the Commons refused to be taxed any further he persuaded the Lords to submit to a capital levy, while many of them also equipped and commissioned ships of war. France was always talking of invasion, and in order to avoid this Henry ordered his ships to confine their depredations to the Scots. At this period the pirate menace grew immeasurably, and

ships dared not even engage in coasting trade without an escort. The English, French, and Scots were equally to blame in this matter, and it is to be feared that even nominally naval ships went a-pirating, often because they could not get their pay in other ways. The Navy was hopelessly disorganised and suffered several humiliating defeats, the principal one being at the hands of the *Sieur de Penheurt* in 1403.

The "Grâce Dieu."

One of the most famous ships of her time was the *Grâce Dieu*, which was built by Henry V in 1417. She was rigged with one great mast and one mizzen, but the inventory goes on to say that she had two bowsprits, which leaves us in some doubt as to her exact rig. The responsibility for her construction was divided between various officials in an extraordinary manner, and one can only suppose either that they were getting an unfair advantage out of the King, or that he was somehow contriving to get advantage out of them. The shipwright in charge of her construction was John Hoggskyns, who, although known as "Master Carpenter to the King's Ships," was in reality the first Master Shipwright in the Navy. The end of this famous ship was tragic, for in Henry VI's reign they economised even to the extent of leaving laid-up ships without caretakers, with the result that she caught fire on January 7th, 1439, while lying on the mud at Bursledon, above Southampton, and was destroyed.

The Channel Patrol.

During the first half of the fifteenth century the experiment of putting the work of keeping the seas out to contract was made more than once. The first occasion appears to have been by King Henry IV in the year 1406, when the work was undertaken by certain merchants, who were to have the right to keep all the prizes they made, with the proviso that important captives could be taken over by the King at a reasonable price. After a few months' trial the idea was given up as a failure, but the Cinque Ports were in no state to take up their old duties and it was soon revived. Tunnage and poundage, which had been instituted in 1347 for the protection of the Narrow Seas and the support of the Navy, was made over to these contractors, and on more than one occasion a loan was raised in the ports on the security of these dues. For many years they had been fixed at two shillings on every tun of wine brought into the country and sixpence in the pound on merchandise, but in 1425 these were raised to three shillings and a shilling. After several attempts to put the business on a sound footing the custody of the sea was handed over in 1454 to the Earl of Salisbury, who was given the added incentive of being allowed to make prize of any British and neutral goods found in enemy ships. The last case was in 1462, when the Earl of Warwick was appointed at a salary of £1,200 a year, but it would appear that after a few months he appointed the Earl of Worcester as his deputy. In the case of these two nobles, however, there is no doubt that the appoint-

ments were political rather than a serious attempt to revive the old custom.

The Burgundian Navy.

According to contemporary authority the Burgundian Fleet was so powerful by the year 1470 that no man dare stir in the Narrow Seas for fear of it. At this time it was apparently composed principally of armed merchant ships with distinctly piratical instincts. Charles the Bold was Duke at that time, and pitted against such an unscrupulous enemy as the King of France, he could not afford to be particular as to the means that he used, while a free hand as to prizes was in his eyes, and those of most of his contemporaries, the very best way of paying a navy.

CHAPTER V

The Tudors

The Tudors' Policy.

The Tudor sovereigns have been rightly given the greatest credit for their services to the British Navy, not all of which transpired just as they had been planned. Their principal interest was trade, and as trade grew so the necessity of protecting it grew in unison, and also the jealousy of foreign powers was aroused. It was the Tudor Traders that brought the Tudor Sea Kings into being, but the result was eminently satisfactory and led to all possible good. Another reason for the Tudors' interest in the Navy was that they realised that the Army of that day was a most inefficient protection. The Feudal System was on its last legs, and the armies that followed it had been made up of the sweepings of the gutter pressed into the service. On more than one occasion they had shown themselves to be quite useless against the professional soldiery of the Continent, and their behaviour was the cause of many of our disasters abroad.

Henry VII and the Navy.

Because he established Portsmouth Dockyard and performed other good works, historians are very fond of regarding Henry VII as the founder of the modern Navy, but research suggests that he has no exclusive right to the title. Admittedly, he had a very pretty appreciation of the value of the Navy for the protection of his beloved commerce, and this alone would give him the right to a very kindly regard; but even in this aim he always kept one eye on his accounts, and being inordinately mean his efforts in this direction were constantly checked. From an offensive point of view his only naval action was the invasion of France in 1492, when he raised a large fleet and transported a big army from Dover to Calais to besiege Boulogne. It was little more than a gesture to obtain for Henry his political aims, but it did that, and in a very few weeks the King was back in London very well pleased with the results of his action.

The Scottish Navy.

Few people realise that the Scottish Navy was once a very important force, especially when it was under the leadership of the semi-piratical but very efficient Sir Andrew Wood and Sir Andrew Barton. King James IV put in a lot of good work on it. Among his achievements was the *Great Michael*, which was constructed by one M. Jacques Tarret,

who records that she took all the oak of Fife, besides much imported from Norway. She was supposed to be 240 feet long and 36 feet beam within the sides, but as these sides were 10 feet thick it gave her an external beam of 56 feet, which must have rendered her quite immune from damage by the cannon of the day. The King of Scotland is reported to have paid about £40,000 for her in all. She carried 300 seamen, 120 gunners, and 1,000 men-at-arms. Her armament ranged from serpentes and other "murdering pieces" to three great Basilisks firing a 200 lb. shot. Small wonder that such a ship was an embarrassment to the Scottish Navy rather than an asset in 1511, so that two years later she was transferred to King Louis of France for forty thousand francs to replace the destroyed *Cordeliere*, the famous *Henri Grâce à Dieu* replacing the *Regent* which was destroyed with her. All the details of the *Great Michael* are given for what they are worth, but it must be remembered that they are most of them purely legendary.

Discipline in the Navy.

The reports that we have of the Navy in the early days of King Henry VIII do not suggest that it was at all an efficient one, for after Lord Edward Howard's defeat it was declared that the discipline was very lax and many of the captains at sea were quite unworthy of their position, that the seamanship of the fleet was poor, and that many of the rowers had abandoned their posts in contact with the enemy and should have been chained to their benches. Even making allowance for the fact that this report was prepared while we were smarting under defeat, things appear to have been very wrong at that time.

The Accession of Elizabeth.

Queen Elizabeth certainly deserves her place among Briton's Sea Kings, for one of her first cares within a few days of coming to the throne was to establish a Channel Patrol for the suppression of piracy and to prevent possible plotters entering the country—a precaution that was made very necessary by the circumstances of the time. The fleet had fallen into evil plight in the last two reigns, and the Queen immediately set about putting it right as far as she could, although to begin with an empty Treasury meant the purchase of merchantmen rather than the construction of specially built men-of-war, which was later her policy. These men-of-war helped the history of exploration and trade as well as of the Navy.

The Origin of the Armada.

The Invincible or Most Happy Armada is generally put down as being the idea of Philip II of Spain, but as a matter of fact the scheme originated in the mind of Santa Cruz, the Spanish Admiral. Whether it was to increase his already considerable reputation or from genuine religious feeling must remain a subject of speculation—probably it was a mixture of the two. It was first put forward in the year 1583 with little success, but the admiral was not deterred and returned to the

attack in 1586, and at the request of the King prepared such a full and convincing plan that preparations were soon put in hand. He reckoned that the conquest of England would call for an eight months' campaign and would require nearly a hundred thousand men. The fleet he suggested was to consist of 150 large men-of-war and some 400 auxiliary craft, an Armada to tax even the resources of Spain at that time. However, after a certain amount of hesitation and a good deal of time to consider ways and means, the King decided to adopt the plan and to throw himself into it whole-heartedly. The English contrived to hold up his preparations considerably, and before the expedition was ready Santa Cruz, who was an experienced seaman and had the whole plan at his finger-tips, died. Had he lived, the history of the Armada and of the world during the next two centuries might have been very different. *Singeing the King of Spain's Beard.*

Although the King of Spain was taking certain measures to prevent the knowledge of his expedition reaching the ears of Queen Elizabeth, there was really very little secrecy about it, and Mr. Secretary Walsingham was quite capable of keeping his Royal Mistress well informed. In 1587, therefore, Sir Francis Drake, who had already earned a wonderful reputation for reckless gallantry against the Spaniards, was selected to command a force that should impede their preparations. Four sizeable men-of-war and two small pinnaces were lent by the Royal Navy, and with armed merchantmen the force was brought up to about thirty sail of all sorts. The second in command was William Borough, a distinguished hydrographer and a man far in advance of his time with regard to the science of the sea, but with no pretence to martial ardour, and a very sad contrast to Drake's fervent gallantry. It ended in his being put under arrest and flying home, a flight which relieved his leader of a good deal of anxiety. The little squadron sailed in 1587, and from certain Hanse traders they learned that although the Armada was collecting at Lisbon, huge supplies of stores and munitions were at Cadiz awaiting transportation. The Tagus was left undisturbed therefore, and making straight for Cadiz Drake forced back the naval outposts, sailed into the port in spite of the efforts of the castle, and destroyed a hundred odd ships which were mostly laden with stores for the expedition. Having "singed the King of Spain's beard," as he laughingly put it, Drake worked up the coast and put the whole countryside into a thorough state of fear. The Marquis of Santa Cruz at Lisbon having ignored an invitation to come out and fight him in the old way, Drake went into the Tagus and burnt about a hundred more ships. From the national point of view it was a triumphant success, but many of his companions were disappointed at the smallness of their personal gain, and persuaded him when he had finished on the coast to go out to the Azores with the idea of plundering any homeward bound galleys which came his way. The *San Felipe* was taken, and while her rich cargo satisfied the gentlemen-adventurers, the capture really had a huge effect on the history of England, for it was by studying the papers that he found on board her

that Drake first conceived some of his most dashing plans—plans which resulted after his death in the establishment of the British Empire. Although it is not at all certain that his exploit really postponed the departure of the Armada from 1587 to 1588, it certainly made the expedition far less formidable than it would otherwise have been and multiplied its cost very much, while its success greatly encouraged the English and so assisted in the defence that they were able to make.

The Duke of Medina Sidonia.

On the death of its originator, the command of the Armada fell to the Duke of Medina Sidonia, a grandee who had only his personal courage and his honesty to suggest him for the post. When the English attacked Cadiz he carried himself, as always, with conspicuous gallantry, but he had no heart in the expedition and does not even appear to have been confident of its success. He hated the sea because it made him sick, and he did everything that he could to avoid the command. Finally, the King wrote to him to thank him for having accepted the command, but one may well imagine that he did so chiefly because it would have been unhealthy, even for a noble of his position, to refuse it. So he completed the fitting out of the expedition with many misgivings, which were not decreased when he received a set of hopelessly vague and contradictory instructions from the King.

The King's Plan.

The root of the King's plan was that the Duke should take the fleet up Channel as far as Margate Roads, and from there ensure the Duke of Parma a safe passage for his invading force of veterans from Flanders, afterwards reinforcing him with a landing party of anything up to six thousand men according to circumstances. That part was tolerably clear, although an experienced seaman would scarcely have chosen the North Foreland as the best position for the job. But the Spaniards feared Drake above all people, and it was known that he had a very big part in our defensive plans at sea. So the admiral had instructions to attack him if he were encountered near the Chops of the Channel, or if he pursued too closely. On the other hand, there were also instructions to avoid an action on account of the necessity of preserving the men for the planned co-operation with the Duke of Parma. A touch of understanding was contained in the warning that the English were superior in their gunnery, and therefore the Spaniards were to make every effort to close. Once Parma was landed the fleet was to take up a position at the mouth of the Thames and co-operate with the land commander, who was the senior, as much as possible. The whole plan shows how little the Spaniards understood the first principles of sea warfare and how little they had learned the history of England, for they proposed to invade while a fleet was left in being and that has always been proved exceedingly dangerous or impossible. There was a supplementary order which directed the Duke, if Parma's invasion were prevented, to make himself master of the Isle of Wight as a base for various raiding operations. The

rest of the instructions concerned discipline, the stern suppression of blasphemy, and a score of other items which would not appear to come within the King's province.

Changes of Plan.

But even this plan, vague as it was in some details and minute in others, was not allowed to stand, and alterations were continually being made. At first it had been planned to hug the British coast as much as possible and carefully avoid the shallows of France and Flanders, where the manœuvring of such a huge fleet would be a very difficult matter. But before long this was changed, and it was arranged that Parma was to join the fleet with his ships and men first at Dunkirk and then at Calais. The plan would alter matters considerably, one effect being that it would probably give the glory to the admiral rather than to the general. Various other changes were effected.

English Preparations.

While this mighty Armada was preparing in Spain, the English were well aware of what was going on and were taking measures to defend themselves. Land and sea forces were raised and trained, but there appears to have been little understanding of how much would fall on the shoulders of the Navy, and the ships were miserably supplied with stores and munitions, more miserably even than the state of the Royal Treasury would warrant. The ships were tied to British waters partly by the authorities' fear that if they ventured far afield the Spaniards would slip past them, and partly because they had not enough stores for any sort of a long cruise. Nearly all the English leaders pleaded to be allowed to hunt the Spaniard on his own coast; they argued that even if they did not defeat him he would never dare proceed with the invasion with our ships ready to burn his towns and ravage his country—and they were quite confident that they could beat him. The confidence of the men is a good indication of how much the understanding of maritime matters had grown within a few decades, and the realisation of the seamen that they were more than a match for soldiers at sea.

The Composition of the Armada.

There is a good deal of misconception as to the composition of the Armada, and also as to how it compared with the British ships which met and routed it. It was really a Latin rather than a Spanish Armada, for all the Latin States were combed for its ships and a number hired from outside. The main squadron, commanded by the Duke himself, was the Armada of Portugal, and consisted of twelve big men-of-war. Against the stories of the huge Spanish ships and the tiny English ones it may be mentioned that only two units of this fleet measured a thousand tons. The second squadron as regards importance was the Armada of Biscay, commanded by Juan Martinez de Recalde, Vice-Admiral of the Fleet. It consisted of fourteen warships, one of them of over a thousand tons and four of them of only twenty apiece. Thirdly, there was the Armada of the Galleons of Castile, under Diego Flores de Valdez—sixteen ships



(Macpherson Collection)

CAPTURE OF A PORTUGUESE SHIP IN THE STRAITS OF MALACCA, 1602

It did not take the English and Dutch long to discover that Portugal was not able to protect the trade she was building up in the East, and many a big prize was taken. In this engagement the English force was under the command of Sir James



THE STRAITS OF DOVER, 1602

1 Spanish galley force going to the siege of Ostend was intercepted and routed by an Anglo-Dutch squadron off Gravelines.



MODEL OF THE "SOVEREIGN OF THE SEAS"
(MADE BY MR. H. B. CULVER, OF NEW YORK)

The Sovereign of the Seas was launched for Charles I in 1637, and took part in many important actions during the next fifty years. She was the finest man-of-war in her day, and not only marked a great advance in naval architecture, but showed to what a ridiculous height the waste of money on gilding and decoration had attained.



(Macpherson Collection)

ENGLISH, DUTCH, AND SPANISH FLEETS OFF DEAL, OCTOBER, 1639

*British pride was hurt by the inability of her feeble fleet in the
 Downs to prevent the Dutch falling on the Spaniards in neutral
 water and routing them. The above "true and exact delineation"*

varying from eight hundred and eighty-two tons to seventy-five. Don Pedro de Valdez commanded the ships of Andalusia, eleven vessels headed by the famous *Nuestra Señora del Rosario*, of one thousand one hundred and fifty tons. The Armada of Guipuzcoa brought another twelve ships, and then there were ten more from the Levant. The fleet of hulks consisted of twenty-three ships, some of them more powerfully armed and manned than the men-of-war, and many of them hailing from the Hanse towns. Two and twenty *pataches* and *zabras*, four big galleasses of Naples, and four small Portuguese galleys completed the fleet. A hundred and twenty-eight ships carrying 29,522 sailors, rowers, and soldiers. The size of the ships of the Naples contingent is not known, but apart from them there were only seven ships of over a thousand tons apiece, and this is probably the total number. The English had two.

The English Fleet.

The backbone of the defending fleet, which was put under the command of Lord Howard of Effingham, Lord High Admiral of England, consisted of thirty-four men-of-war. Two of them were of over a thousand tons and another six of six hundred and over, so that in point of size the enemy had a big but not an overwhelming advantage. Our ships were better armed, however, and our men were better trained in gunnery, while in seaworthiness and weatherliness we had a huge advantage. Under Sir Francis Drake in the *Revenge* were thirty-four merchant ships of all sorts, but some of them were every bit as fine as men-of-war of the same size, for ships which sailed to the Levant and the West never knew what they would meet and had to be prepared to defend themselves against vastly superior forces. The City of London supplied thirty more merchant ships ranging in size from three hundred tons to eighty. Eighteen more sizeable merchantmen and forty-three little coasters were ready to fight, fifteen more carried victuals to the West, and another twenty-three ships of all sizes came forward and volunteered when the enemy was on the coast. Many of these merchantmen did little but swell the lists, the fighting falling on a portion of the fleet only. If our ships could keep their distance they were all right, for the Spanish gunports were made very small and so added to the inferiority of their artillery, but once they were laid alongside they would be in sorry plight, for the high sides of the Spaniards made them very difficult to board in force, and their soldiers well knew the use of their swords and pikes. Most important of all, the Spanish ships made a tremendous leeway and would not sail anywhere near the wind.

The False Start.

To the superstitious the start of the Armada was not auspicious. It left Lisbon in fine style, but next day only a part of it contrived to make Corunna. Bad weather had sprung up and the greater part of the fleet was scattered. Some of the ships were blown up as far as the Scilly Isles, where they chased some English merchantmen and raised the alarm that

the invaders had arrived. Howard put to sea, although he was doubtful of the truth of the report, and wasted a lot of time and invaluable stores in the pursuit of the phantom fleet, whose ships in the meantime had returned to the main body at Corunna. There Medina Sidonia actually wrote to King Philip advising him to give up the whole project and make terms with the English, an action which one would have expected to result in his immediate relief. It is rather remarkable to note in this letter that after the whole energies of Spain had been directed to the equipment of the fleet the victuals were insufficient and scarce—in fact, except for ammunition, they do not appear to have been much better found than the English ships. At Corunna the ships were repaired and watered and finally got ready for departure, when the spirit of everybody but the admiral appears to have been good.

The Real Start.

Finally, the fleet got away in the early morning of July 12th, the signal to weigh being given as soon as the weather gave promise of becoming calm. This it did rather too thoroughly, for some hours after sailing the whole fleet was still clustered round the mouth of the harbour. Then a fair breeze sprang up, and they got way on, only to be badly scattered by a storm on the seventeenth. By the twentieth practically all the missing ships had rejoined the flag and the English coast was in sight, signal beacons on every suitable hill passing the alarm. The fleet in Plymouth had already been warned by Thomas Flemyng in the *Golden Hind* and was warping out of the port, greatly hindered by a south-westerly breeze which was just what the invaders wanted. They had made up their minds to attack the English in Plymouth, but by the time they arrived in sight of the port our ships were most of them outside and very ready to do the attacking.

The First Action.

Howard, Drake, Hawkyns, and Frobisher were clear by the morning of the twenty-first, and although they had only a portion of the fleet with them they considered themselves strong enough to attack, not so much with any hope of defeating the enemy as to prevent him making any attempt at a landing. They got the weather gage, and sending in the little pinnace *Disdain* to give the Spanish Admiral defiance—which she appears to have done unmistakably—Howard took his flagship the *Ark* alongside the Spanish leader and hammered her until he was compelled to desist by the ships that came to her assistance. Meanwhile Recalde, whom the British respected far more than his leader, was having a very bad time from Drake and his kinsmen, and was very glad to withdraw. This was scarcely what the Spaniards expected and there was a good deal of confusion among them, an explosion blowing out the deck of the *San Salvador* and collisions doing a good deal of damage. At the end of two hours there was little risk of the Spaniards trying to land, and Howard decided to call off the action until more ships could come out, at the same time sending warning to Seymour and Wynter who

had their squadrons further up Channel.

Following up the Enemy.

That night the Commander-in-Chief gave Drake the job of keeping in touch with the enemy, guiding the fleet with his big poop lantern. There was always something of the pirate about Drake, however, and as soon as he saw one of the enemy's big ships straggling slightly the promise of loot was too strong for him. He had no desire to share his prize with others, so extinguished his lantern and, of course, caused the greatest confusion in the fleet while he pursued his prey. She was a big enough mouthful for the little 500-ton *Revenge*, for she was the *Nuestra Señora del Rosario* of 1,150 tons, one of the biggest ships in the whole Armada and flagship of Don Pedro de Valdes. She mounted forty-six guns, and had on board 304 soldiers and 118 mariners. The *Revenge* had forty-three guns and 250 men in all, and even the fact that the Spaniard was already damaged aloft could not make the odds even. She was taken, and her valuable commander—he afterwards proved to be worth £3,000 ransom—transferred to the British ship, which then sent her prize into Dartmouth and hurried after the flag. Drake's action very seriously hampered his admiral, who was hanging on to the skirts of the enemy with scarcely a ship to support him in consequence of the confusion it caused. Had the enemy turned with any display of energy things might have gone very ill with us. Drake caught up with his chief on the evening of Monday the 22nd, and in the meantime we had taken possession of the *San Salvador*, which had been badly damaged by explosion.

The Armada Treasure.

In the loss of the *San Salvador* was the beginning of all the wonderful stories of the Armada treasure which has cost so many thousands in later years. She carried the Paymaster-General of the Fleet and a large part of the King's treasure, although how much this treasure was will never be known. There is no great reason to believe that it was a very large sum, for the intention of the Spaniards was to make the English pay for everything, and they were certainly not counting on the expedition costing them very much after the first outlay. Naturally a fleet of this size would have to carry a certain amount of cash for ordinary expenses, but to risk a vast treasure on such an enterprise, when there was no need for it and when the King had already impoverished himself in fitting out the expedition, would have been ridiculous. Such gold as she carried was taken off before she was allowed to fall into our hands, but there is not the least reason to believe that it was all transferred to the *Tobermory* or any other galleon; in fact, from the number of ships which assisted the disabled paymaster it is more likely to have been tolerably well distributed.

The Second Fight.

Materially the results of the first action were not great, but they

served to encourage the English hugely and in at least equal degree to discourage the enemy. The handiness of our ships and their better gunnery were as obvious as the fact that many of the Spanish leaders were neither efficient nor loyal, for the way Recalde was abandoned was disgraceful. On the morning of Tuesday the 23rd the wind, after a calm which gave the enemy some chance of using their oars, came from the north-east, giving the Spaniards the weather gage. From morning till night a confused battle raged furiously and with particular gallantry. Several times numbers appeared to give the Spaniards the chance of cutting off one or other of our ships—*H.M.S. Triumph* especially having a narrow escape—but on each occasion she was either rescued or managed to slip past her opponents. Lord Howard in the *Ark* appeared to be everywhere, while some of the armed merchantmen whose value was doubted did useful work in heading off Spanish ships which were trying to get out of the mêlée. At the end of the day the greatest advantage lay in the fact that the Spanish were hopelessly confused and still further disheartened. Their ships were packed with men burning for a hand-to-hand fight on deck, but the English ships were handled so well that they were never given a chance, while at long bowls the English gunnery caused heavy casualties.

The Action off the Wight.

The indecisive second action off Portland was followed by a comparatively quiet day on the 24th, and the action off the Isle of Wight on the 25th. It began by the English very nearly contriving to cut off the Spanish galleasses, but the wind came up enough to permit the main fleet to come to their assistance, although not before they had suffered considerably. The *Triumph* was soon again in danger, but she towed off with her boats and slipped out, her handling being specially mentioned with admiration by the Spaniards. After four hours the majority of the English ships had expended all the ammunition they could spare, and the ships hung on to the skirts of the Spaniards, who had now little idea of landing until they could reach Parma, and apparently had no conception of the bad state of the defenders' ships. It is interesting to note that the Lord High Admiral took advantage of this very short and uncertain lull in the proceedings to call to his flag a number of his subordinates and knight them on the deck of the *Ark*, a proceeding which must have greatly increased the confidence and enthusiasm of the fleet. We inflicted more damage than we received, but the fighting was really quite indecisive.

Calais.

Medina Sidonia had intended to get into touch with the Duke of Parma at Dunkirk, but on the evening of the 27th the Spanish Fleet anchored off Calais, and the English also anchored outside them and within comfortable cannon shot. He communicated with Parma, and although we had been reinforced with the Dover squadrons, all fresh ships and spoiling for a fight, we certainly could not afford to let the two forces unite. All through the night and the next day feverish prepara-

tions were going on for an attack by fireships, a method which seemed particularly promising by the huddled position of the Spanish ships to leeward and the condition of their crews which had already been made obvious. The confusion that was caused when the blazing ships blew down on the enemy must have exceeded all expectations ; the Spaniards either slipped or cut their cables, and the British ships put the final touch to their panic. No opportunity was allowed to pass, and the guns of the English completed what had been done by fear and countless collisions. On top of it all came the news that Parma seemed in no hurry to join the fleet and made no effort to embark his forces. The Armada was hopelessly scattered ; many of the ships were without ground tackle, and their anchorage off Calais was very insecure even if they could regain it, which was by no means certain. By the time they had reached Grave-lines the English had made a number of prizes, other ships had been driven ashore, and there was little left but flight.

The Flight.

Medina Sidonia has recorded his intention of trying to regain the Channel and he may perhaps have harboured that hope, but the practical man knew better. The only two alternatives were flight or fight, and most of the Spanish captains had already had quite enough of the latter. By this time they were very short of shot and most of them were leaking badly, so that after a council of war it was decided to make Spain by the only route possible—the North Sea and the Scottish coast. Nothing could please the English better, and they were very well content and well advised to follow them at a distance to make sure that they did not attempt a landing or any further operations. The Spaniards made every attempt to keep with the flagship as she gave the course between the Shetlands and Orkneys and along the west coast of Ireland, but their ships were never weatherly and such a voyage would try the best ships of the age. All the way home to Spain the shores were strewn with wrecks, while the sick and wounded died in hundreds on board the foul ships. Water ran out, and many of the parties who landed to obtain it were cut to pieces. No mercy was shown to shipwrecked mariners in nine cases out of ten, and the only excuse that can be made for their treatment is that experience in the Low Countries and the Indies had shown our people just what they could have expected had the Most Happy Armada been successful. Only about half the ships of the fleet struggled back to Spain with a miserable fragment of their crews. The King was resigned and ascribed his bitter disappointment to the Will of God. It was just another example of the futility of carrying out sea operations with anybody but men born and bred to the sea, and with the love of the sea in their very blood. Sailors had beaten soldiers at sea.

Drake and Norry at Corunna.

Although the Great Armada was defeated the English realised that the danger was not yet over, and accordingly in the following year Sir

Francis Drake and Sir John Norry with a syndicate of their friends and a number of royal ships sailed, partly to worry the Spanish and partly to support the claims of Dom Antonio to the throne of Portugal. The expedition was badly fitted out and quite inadequate for its job. They had some success at Corunna, but failed to capture the whole of the town, and eventually the force had to re-embark after doing a good deal of damage. The troops were then landed at Peniche, captured the place and marched towards Lisbon, while the fleet went round to the Tagus. Eventually the force was compelled to seek refuge in its ships with heavy casualties due to sickness, but the Navy captured over seventy ships taking stores for the projected new Armada.

Minor Expeditions.

After this time-honoured fight there followed a long succession of attacks on the Spanish, with just as many Spanish attacks on our commerce when it appeared that the job could be carried through with impunity. The capture of treasure-ships from the Indies became a famous method of rebuilding fallen fortunes, although it is to be feared that it is only the successful adventures of this sort whose history has come down to us. Drake, Frobisher, Raleigh, Cumberland, and many others led expeditions, some of them making fortunes and others ruining themselves. It is difficult to know just whether some of these operations should be classed as piracy, privateering, or operations of war, but in any case they were what were called into being by the circumstances of the time, and without them it is difficult to believe that the British Navy and British shipping could have survived.

The Last Fight of the Revenge.

The British administration was not content with any single expedition to annoy the Spaniards, but kept up a constant campaign. In those days Spanish commerce meant nearly as much to the country as it did to us in the war with Germany, especially the annual treasure-fleets from the Indies. In 1590 squadrons cruising in the trade lanes caused the treasure-fleet to abandon its voyage and turn back, and the almost complete stoppage of the revenue of the country was a very serious handicap to the Spanish administration, especially as they had not yet completely given up the idea of a new Armada. The same policy was followed in 1591, when a British squadron went to the Azores with the hope of capturing the treasure. Unfortunately, the Spanish were not to be caught so easily, and they sent out a huge fleet to meet the convoy in the Azores. The small British squadron that had been sent to guard the coast of Spain was quite powerless to stop it, and all they could do was to send warning to Lord Thomas Howard, who had a few ships at Flores, Drake's old flagship the *Revenge* being commanded by Sir Richard Grenville. The ships were in no condition to fight, being engaged in watering and changing ballast, while some of them had half their crews ashore sick. They weighed or cut their cables as quickly as possible and, knowing from experience that the clumsy Spanish ships would never

catch one of ours to windward, they contrived to weather them. The *Revenge* was the last to weigh, perhaps because Sir Richard refused to abandon his sick, perhaps because his duty as Vice-Admiral was to cover a retreat. It ended in his little ship, with only a hundred men fit for duty, getting right in the middle of the entire Spanish Fleet. Howard gallantly attempted to cause a diversion, but the Spanish Admiral considered that one ship in his clutches was worth more than half a dozen who could always evade him. So began the grandest defence in the history of the Navy, a fight that lasted for fifteen hours against colossal odds and ended in the ship being surrendered against the orders of her dying commander, with her ammunition expended, six feet of water and more in her hold, and over forty of her gallant men killed. The remainder of the fleet escaped, and Alonso de Bazan, the Spanish Admiral, waited for the treasure-fleet. The ships turned up, but the fear of the British had caused them to leave their treasures, so that the object of the expedition was attained after all. Before he could get his unwieldy convoy clear of the islands, however, a tremendous gale burst on it, and more than half the fleet was driven ashore or overwhelmed. The *Revenge* herself was wrecked with heavy loss of Spanish life.

Further Threatened Invasions.

At the same time as the death of Drake stirred the nation trouble was foretold in the Spaniards being given an easy opportunity of taking possession of Calais, where they had a very excellent chance of invading England, and had every intention of carrying it into effect. To distract their attention, therefore, an expedition was prepared against Cadiz under the joint command of the Lord High Admiral and the Earl of Essex, consisting of seventeen Royal ships, twenty-four Dutchmen, a number belonging to Lord Howard of Effingham, and something like a hundred armed merchantmen and store-ships. The instructions given were that the chiefs were to direct their principal attention against the Armada that was known to be collecting against us and in aid of the Irish rebels, although as a matter of fact the rumours in this direction had been grossly exaggerated. The policy of the Queen in this exploit, however, was vacillating in the extreme, and the orders were altered and almost cancelled before they sailed, just as they had been when Drake departed to singe the King of Spain's beard. The Spaniards had not the least suspicion of the attack, and from merchant ships captured more or less piratically on the way out it was learned that a number of ships were in the port without any adequate protection. However, they put up a very gallant defence, and with the aid of the batteries inflicted very considerable losses on the English as they fought their way through the bay and into the inner roads. The casualties were heavy on both sides, but the material losses of the Spaniards were enormous, though only two big ships were actually captured to be added to the Royal Navy under anglicised names. The defenders contested every inch of the path, and the fighting in the narrow streets of Cadiz was of the fiercest description. Finally, the whole town was in the hands of

the English, and it was estimated that the Spanish loss amounted in all to twenty million ducats. Comparatively little spoil fell to the hands of the English, however, and in Faro they were even less successful. But the Bishop's Library was taken away by Essex, and is the nucleus of the present wonderful Bodleian Library.

The Armada of 1597.

Although this expedition perhaps prevented him making a dangerous attack on us, it spurred King Philip on to another Armada, and in 1597 he collected a fleet at Lisbon for a descent on Ireland. On this occasion he appears to have been quite successful in concealing his designs from the English, but bad weather intervened and the remnants of the fleet were glad enough to crawl back into Ferrol. Here they were fitted out again, but by this time Elizabeth's counsellors were on their guard, and accordingly Essex, with Lord Thomas Howard and Sir Walter Raleigh, sailed on what is known as the "Voyage to the Indies." Once again both Royal ships and armed merchantmen were employed in alliance with a Dutch squadron of ten ships, but the whole affair was badly bungled and the Spaniards were waiting for us on the coast. Accordingly this part of the project was abandoned, and the Azores were attacked instead. Raleigh was given no instructions, and acting on his own very good judgment offended Essex, when the beginning of the enmity between the two great adventurers was caused. After that, with lack of co-operation between the leaders, nothing could be done, and the expedition returned to England with little result.



(Macpherson Collection)

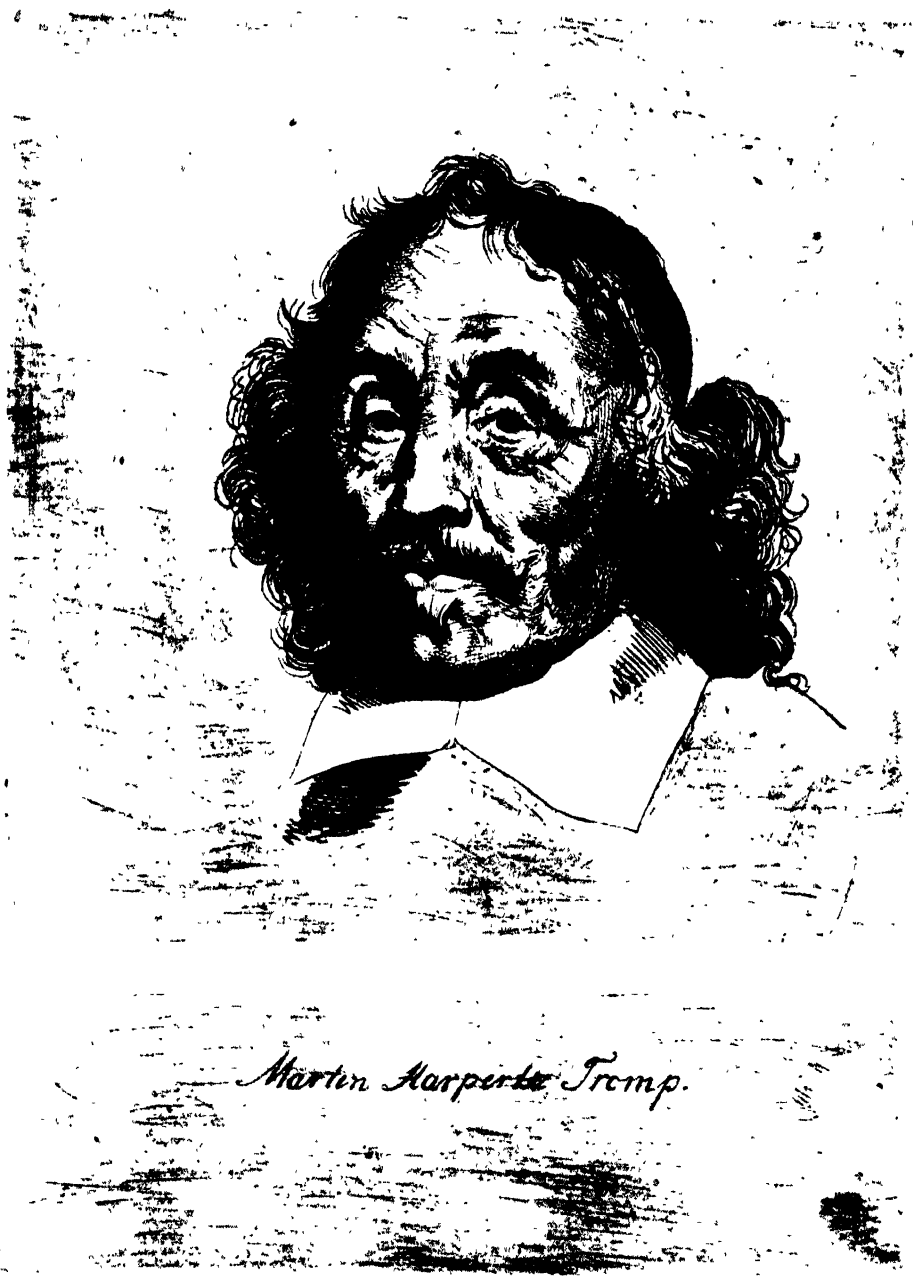
THE BATTLE OF THE DOWNS, 1639

A magnificent Spanish fleet which was sent to drive the Dutch off the seas was cornered in the Downs by an inferior fleet under Tromp and routed, a blow from which the Spaniards never recovered during the war.



THE THREE DAYS' FIGHT

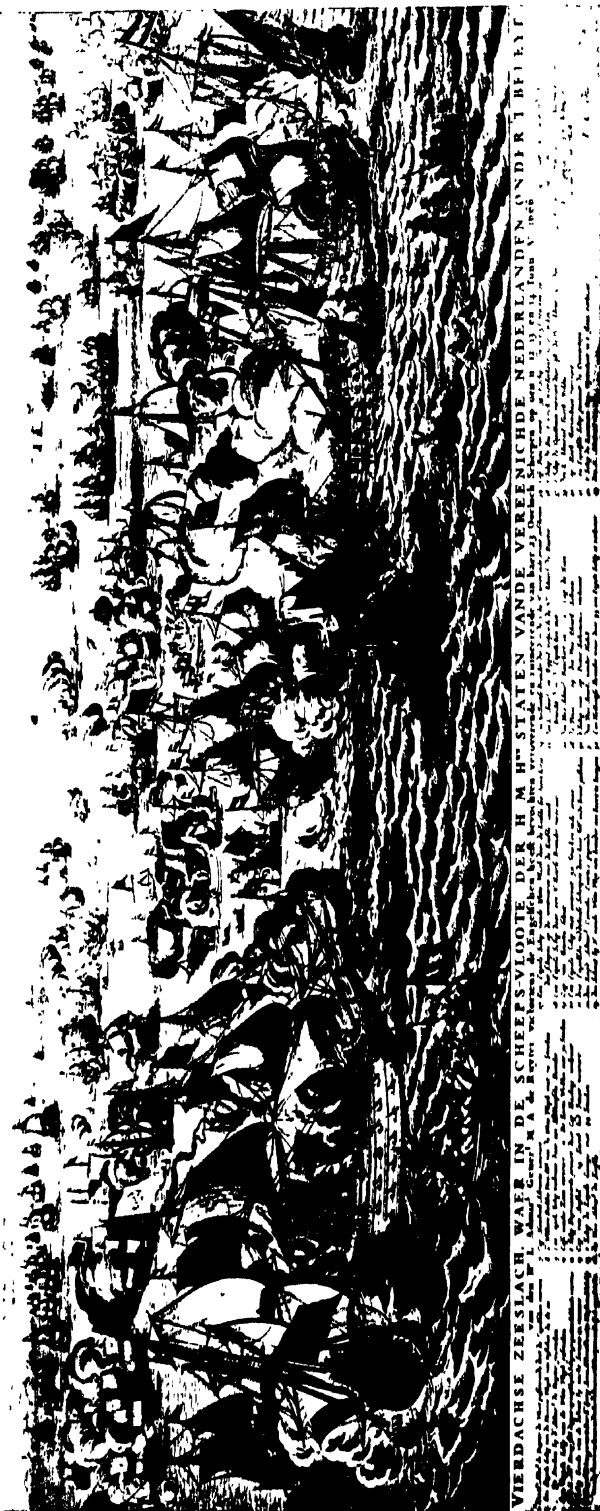
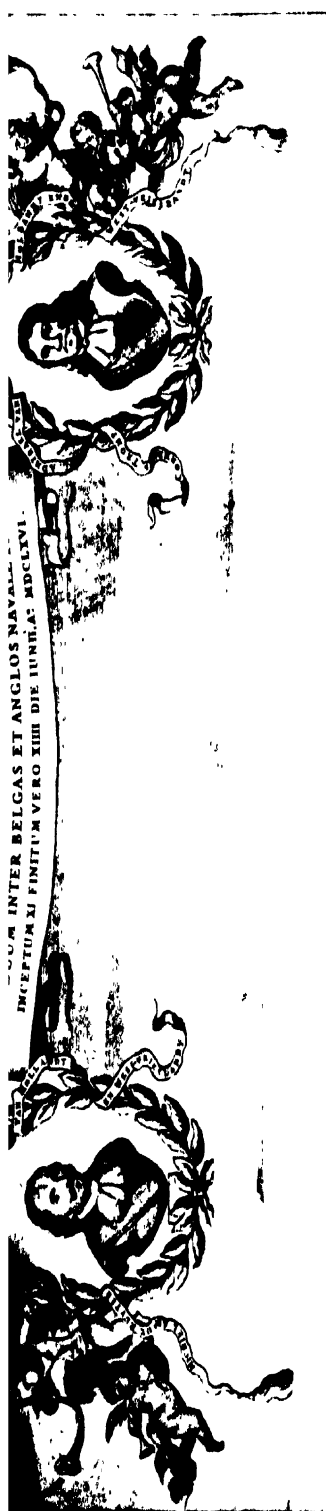
Defeated off Dungeness in 1652, Blake had his revenge in the following year, when he routed the Dutch in the Three Days' Fight off Portland, and very nearly wiped out their entire fleet.
(From a colour print lent by Messrs T. H. Parker)



(Macpherson collection)

MARTIN HARPENTSZOOM TROMP

Second only to De Ruyter among the Dutch Admirals, Tromp was worshipped by his men, and, curiously enough, maintained a personal friendship with his great enemy Blake. The above portrait is from an etching by Jan de Frey, after a drawing by Jan Lievens, which is now in the British Museum.



(Macpherson Collection)

THE FOUR DAYS' FIGHT OFF THE NORTH FORELAND, JUNE, 1666.

History is not inclined to be so hard on this battle as contemporary opinion, which described it as 'The Four Days' Bloody Blunder.'

(From a contemporary engraving)



ROBERT BLAKE (1599-1657)

General and Admiral at sea, Blake was a merchant seaman before he retired and went into Parliament, and later made his name as a cavalryman. He was one of the outstanding figures—gallant, cool, and a clear thinker—and had much to do with the revival of English prestige.



(Macpherson Collection)

PRINCE RUPERT, COUNT PALATINE OF THE RHINE
(ENGRAVING BY BLODDING, AFTER SIR PETER LILLY)

Prince Rupert as an Admiral showed most of the qualities and faults that he had exhibited as a cavalry leader in the Civil War. His life at sea is divided into his famous course as a corsair, not far removed from piracy, and his service as an Admiral after the Restoration. The above portrait is from a contemporary print.



(Macpherson Collection)

THE DUTCH IN THE MEDWAY, JUNE, 1667

Over-confident in the success of his seamen, and attempting to force humiliating terms on the Dutch, Charles II left them the opportunity of burning our shipping 'right in the Medway', and obtaining a peace satisfactory to them.



EARL SANDWICH REFUSING TO LEAVE HIS SHIP
WHILE ON FIRE, IN THE BATTLE OF SOLE BAY.

(Macpherson Collection)

EARL SANDWICH AT SOLE BAY
(AFTER THE PAINTING BY SIR R. SMIRKE, R.A.)

Appointed originally for political purposes, Earl Sandwich, the patron of Pepys, proved his worth as an admiral, and died a gallant death when his flagship blew up.

CHAPTER VI

The Navy and the Stuarts

James I and the Navy.

When James I came to the throne he had at his command the finest fighting force at sea, for Elizabeth had brought it up to a magnificent pitch of perfection and had left it to him fit to go anywhere or do anything. In a matter of months he had killed the wonderful spirit of the Navy and had ruined the service while spending a lot of money on its upkeep. It was not that he did not believe in Sea Power as long as it did not offend the Spaniards, but he had a most unhappy knack of invariably choosing the wrong men for the job and although he himself was as keen as possible and had passed his enthusiasm on to Prince Henry, the state of the Fleet rapidly deteriorated and the corruption that sprang up in naval circles was appalling. James's action in immediately making friends with the Spaniards took the edge off the men's enthusiasm, for there did not appear to be any other head which they could conveniently hit. Finally things got so bad that the whole of the naval organisation had to be overhauled in 1618. As an example of what went on, the *Bonaventure* was considered too old for service and was ordered to be replaced by a new ship. The Treasury paid for her care and maintenance for seven years after she had actually been broken up, and although somebody got seventeen hundred pounds on account of her successor she never appeared.

Fighting in the East.

Although James I made friends with Spain and kept the country out of war in European waters, he was unable to control the forces in the East, where the East India Company was making such progress that it had excited the envy of its Dutch and Portuguese rivals. Fighting in these waters became almost continuous, but the Navy had no part in it. It will be described therefore in its more appropriate place, but as it caused the issue of numerous Letters of Marque it had considerable military importance.

The Suppression of Piracy.

At home the Navy had a certain amount of work to do in the suppression of piracy round about the year 1610. Elizabeth had

granted Letters of Marque against the Spaniards, but legally these were cancelled when James made peace with that Power. As he was generally content to pardon any offender with a homily on the sacredness of peace, the privateers soon came to regard his edicts very lightly, and from that it was only a step to open piracy. Things got from bad to worse until in 1614 Monson and Sir Francis Howard took the available ships of the fleet against the rovers. A little judicious hanging worked wonders, but the Barbary corsairs were a very different proposition and kept the Navy busy, although the Saltee ships were so much faster than ours that few were taken.

The Spanish Scare.

In 1617 the Spaniards were known to be preparing a big force, and the question arose as to whether it was to be a surprise attack on us or an attack on the Barbary corsairs as the Dons declared. The King pulled off a very clever stroke in immediately raising a fleet to co-operate with them to rout out the pirates, thus having his force ready to meet an invasion if necessary and at the same time avoiding precipitating hostilities. It was one of the few occasions on which James made good use of the Navy and it resulted in the Spanish scheme, whatever it might have been, being abandoned. Meanwhile, however, the Duke of Buckingham as Lord High Admiral had determined to use the ships so raised quite straightforwardly, and accordingly Mansell in 1620 sailed from Plymouth against the Barbary corsairs with six men-of-war and twelve hired merchantmen. A certain amount of damage was done to the corsairs, but little enough considering the size of the expedition.

The English as Mercenaries.

One of the most extraordinary incidents in the history of the Navy occurred in 1624, shortly before the death of James I, when he entered into an agreement with the French King which hired out to that monarch two British men-of-war and six armed merchantmen under Admiral Penington for use against any enemy that he might have, excepting the English and the Scots. All the details of the affair are somewhat obscure, but it would appear that the Duke of Buckingham had a very personal finger in the pie and that had his scheme been carried out it would have practically meant handing over the ships. As it was, only hopeless confusion resulted and eventually the fleet returned to England, when they were straightway ordered back and there discovered that they were not to fight against the Genoese as had been suggested but were to be used to put down the rebellious Huguenots at La Rochelle. Eventually only one man in the fleet consented to partake in such a service, but most of the ships were used.

The Ship Money Fleet.

The real trouble about ship money arose when a new writ was issued in August, 1635, levying the tax on the inland as well as the

maritime counties and towns. Many of the agricultural districts had not the slightest interest in ships and shipping, and the demand caused the greatest discontent among them. The third writ for ship money in October, 1636, made it evident that the demands on the inland districts were to be permanent and it was against this that John Hampden and others took the stand which indirectly led to the Civil War. In the meantime, however, a fleet had contrived to get to sea and the moral effect of its existence was considerable. It did not extend, however, to the Dutch herring fishers who stubbornly refused to take out licences, in spite of the repeated demands of the impecunious King.

The "Sovereign of the Seas."

The crack ship of Charles I's Navy, the money for whose construction was undoubtedly a contributory cause to losing him his head, was the *Sovereign of the Seas*, which was rightly known in her day as being the finest man-of-war afloat. She was built at Woolwich in 1637, and the fact that this number is also given as her tonnage in the old Navy List is curious. The Corporation of Trinity House, which in those days appears to have had very few of the qualities for which it is now known, was very much against her being built, for they maintained that a ship of her size, mounting three tiers of ordnance, could not possibly be safe at sea and could not possibly be accommodated in any British harbour. Both these jeremiads proved totally incorrect, for she never had any trouble over her draught and had a wonderful career. The original plan was for the King to launch her in State, but after he had taken all his Court down at the public expense it was found that the tides would not serve and a similar outing was planned for the next springs. A gale, however, sprang up the night before and to prevent her bumping herself to pieces she had to be launched in a hurry by the light of flickering torches on her deck. Her total cost was just over £40,000, of which nearly £7,000 was spent on gilding and decoration, a luxury which caused a great outcry but curiously enough came to be so loved by the people that when the Commonwealth ordered that all our men-of-war should be painted a sombre black—"sad colour"—they would not allow the *Sovereign of the Seas* to be touched in any way. She carried a hundred guns of various sizes and in a life of nearly sixty years she certainly used them to very good advantage, for her fighting record was magnificent and she was always known by the Dutch as the *Golden Devil*. Eventually, in 1696, she was burned by the carelessness of her shipkeeper, who allowed a lighted candle to fall over in a store-room, and by the false economy of the Government, who limited her fire-fighting apparatus to a few leaky buckets.

Charles I and the Navy.

Many people wonder how it was that Charles I could place so little trust in his fleet when it was essentially the Royal Navy and he had taken so much personal interest in it. The truth is that all through his reign he had been interested enough in material but had neglected

personnel most shamefully, with the result that it is small wonder that the men turned against him. The condition of the seamen was wretched enough in Elizabeth's time but nothing to what it was in Charles's, when moreover there was practically no excuse for it. Absolutely no provisions were made for the comfort of the men, who were forced to sleep on the wet decks after having been pressed in the street and having had little chance of getting more than the clothes in which they stood, were fed on the vilest food imaginable and little enough of that, and seldom got their pay. To compare it with Elizabeth's time it may be mentioned that the Gentlemen Adventurers took great pride in sharing the hardships of the men, but Buckingham, when he prepared for the La Rochelle Expedition, put aside a transport entirely to act as a kitchen and shore ship for the luxuries that he was taking with him, while the men were starving. The Roundheads on the other hand promised them great things and in the beginning fulfilled some of their promises.

The Civil War.

The first move of the Navy in the Civil War was to vote a combined allegiance to King and Parliament, an attitude which became impossible as time went on. Married to a French Queen the King naturally had every hope of help from across the Channel, but to get this the allegiance of the Navy was imperative and the attitude of the Navy was becoming more and more uncertain. The Earl of Warwick was the Parliamentary Commander-in-Chief with Sir William Batten under him. By this time Queen Henrietta Maria had gone across to France for help, both financial and otherwise, and one of the first duties of the Parliamentary fleet was to prevent her return without precipitating an outbreak of hostilities. It will be remembered that in Plantagenet days the Fleet was regarded as the personal property of the King, and this attitude towards Charles's enemies was the direct result of its having become a national service.

The Navy in the Struggle.

The first trouble with the Navy was when the Queen contrived to land at Bridlington with stores and treasure for the King. Batten arrived almost immediately afterwards and at once opened fire on the ships, but unfortunately among his shots were a number of overs which struck and partially wrecked the house in which the Queen was lodged. Nothing could have been better calculated to arouse the chivalry of the Cavaliers, and Batten's action, although it appears to have been entirely accidental, aroused tremendous enthusiasm. During the Civil War there was little enough genuine naval activity, but the Fleet, being on the side of the Puritans, undoubtedly contributed very greatly towards the result by preventing help reaching the King from abroad. At the same time there was so little real activity that the men got bored with their constant patrol against an invisible enemy. Once again history repeated itself, and before the war on land was half decided

Parliament was in no condition to trust its own fleet. This was evident when Colonel Rainborow was appointed to succeed Sir William Batten in 1647 and was promptly turned out of his own flagship. By this time, although it had greatly assisted the Parliamentary cause, the Navy had rendered doubtful service to England in undermining her prestige abroad by showing how easily her King was frustrated. After Rainborow was refused by the Fleet Batten was restored and celebrated his return to favour by taking eleven men-of-war across to Holland to join the Royalist Navy.

The Commonwealth Navy.

Under the Commonwealth organisation the Navy was very different to what it had been under the King. Like most new republics they were enthusiastic for committees and there were any number set up for various purposes. At the same time it was a splendid period for the Navy because the rulers of the country realised two things—firstly, the importance of Sea Power, and secondly the necessity of keeping the Navy employed. This not only meant a powerful fleet but also the rapid increase of British prestige abroad, and even the mismanagement of the subsequent era could not totally destroy this work for some years. At the same time the Commonwealth's idea of naval management was by soldiers rather than sailors and the commanding officers were officially known as generals at sea. There is an old story that Blake ordered his fleet to wheel to the right the first time he took command of it, and although this lacks confirmation it is not by any means impossible of many of his colleagues. Among these soldiers at sea were some of the finest commanders of their age, but nevertheless the Commonwealth was not always well treated by its subordinates. Most of its captains were promoted on account of their ability as seamen without reference to their moral or general character and it is to be feared that they did not hesitate to rob their employers to the very limit of their opportunity. This was in spite of the fact that the Government began by treating the men very well, both in respect of their wages and also of the prize money that they earned, while they encouraged individual effort by the award of medals, both for seamen and officers.

The Mediterranean Station.

Hitherto England had taken but few measures to enforce her naval position in the Mediterranean although ample warning had been received that these waters were becoming more and more important from the point of view of commerce. When Blake pursued Prince Rupert into the Mediterranean, however, our people at home began to realise that the sea had possibilities, and a powerful fleet there now added greatly to the respect with which our flag was treated. The Dutch did not like this at all, but at that time we were too big to be touched and the two fleets remained on the spot in mutual jealousy without caring to tackle one another. In addition to maintaining our prestige the ships that we sent "up the Straits" were a very great

hindrance to the operations of the Barbary corsairs who by this time practically ruled the Middle Sea.

The Perils of Shipping.

In the early days of the Commonwealth peaceful shipping was in a very perilous position. Not only was it attacked by the Saltee rovers both inside and outside the Mediterranean but it was also the prey of more or less legitimate Royalist privateers, a horde of small craft who hailed from Dunkirk no matter what the political situation happened to be, and in addition a number of out-and-out pirates who made Jersey their base until Blake routed them out in 1651. Yet after all this the Commonwealth was making progress and the prestige of Britain was gradually increasing, to be put on a firm basis as a result of Cromwell's war against the Dutch.

The Cause of it all.

For some years past events had been leading towards a clash of interests between England and Holland and the tension of the Civil War did nothing to avert it. In the East fighting was the rule rather than the exception and in time this was bound to breed ill-will at home. When the herrings deserted the Baltic and thereby ruined many Hanse towns the Dutch took up their pursuit and did a great part of their fishing along the English coast without going to the trouble and expense of taking out the licences that were supposed to be necessary. In addition the Dutch carrying trade was rapidly increasing, and although it was undoubtedly the biggest in the world it was feeling the growing English competition very badly indeed. Besides the actual competing interest there was the fact that England was in a position to shut in the Dutch just as she shut in the Germans during the late war, and this fact was constantly in the minds of their shipping folk. Fuel was added to the fire by the fact that relations with the French were getting very strained and that the Dutch were becoming more and more friendly, not only with them but with the Danes as well. When the Prince of Orange died, Cromwell proposed a very close alliance with the Dutch republic, an alliance which afterwards grew into what was virtually a merging of the two countries, but as Holland would obviously get very much the worst of the bargain and would practically lose her independence this offer was rejected and its rejection gave further offence. Finally the famous Navigation Act—often spoken of as the original but really only a revival of mediæval legislation—put a full stop on the Dutch carrying trade as far as England was concerned. The Dutch regarded it as being directed against them entirely and in a very short time ambassadors were recalled. Attempts to arrange a compromise were met with an astounding list of English grievances all over the world, while a large number of Dutch ships were seized under the provisions of the Act.

The Commencement of Hostilities.

The Navigation Act was passed on the 9th of October, 1651, and

immediately trouble began. Within a month privateers' commissions were being issued and a huge Dutch fleet was being prepared. There was still no declaration of war, but as both nations were spoiling for a fight and both had powerful fleets at sea there was only one possible outcome of the situation. The match was applied to the magazine by Captain Young with a small squadron falling in with a dozen Dutch ships off the Start, merchantmen convoyed by three men-of-war. The Dutch Admiral struck his flag in time-honoured fashion in British waters but his Vice-Admiral refused to and was promptly given a broadside. After a sharp action the honours were paid but it was all that was wanted. Within a few days a small British squadron in the Downs was suddenly confronted by a Dutch Fleet of forty-two ships under Tromp. The Admiral sent a messenger on board the British flagship to say that he was there by stress of weather which made it impossible for him to stay at Dunkirk, but he was answered in somewhat surly fashion that the best thing that he could do was to get away as quickly as possible. Blake had a further squadron at Rye and received an urgent appeal for support, with the result that an action took place between Dover and Folkestone. It was fought with the greatest fierceness, shore boats constantly putting off from the coast with volunteers for the British Fleet, mostly fishermen. There were a good many casualties, and although it was really undecisive the British had the better of the action. It was probable that they would have made it a victory had not Tromp received at nightfall a message that there was a rich Dutch fleet of merchantmen in the Channel and his first care was to protect them. The effect of this action was to cause an immediate and imperative public demand for war, to which the Dutch were by no means averse. Both countries impressed both ships and seamen.

The First Phase.

War being officially declared, the first action of the British was to attack Dutch commerce, and especially the herring fleet which contributed so much to the quarrel. Blake was sent North to cut up the fishermen and to destroy the Dutch Baltic trade, and he carried out his instructions with the utmost consideration for non-combatants, a consideration that was far ahead of his day. Meanwhile Ayscue was in the Channel on similar work and making a number of rich prizes. The returning Dutch ambassador was able to take full information back to Holland concerning the disposition of our fleet, and meeting Tromp gave him all the intelligence that he wanted of the weakness of Ayscue's squadron, over which he had a great superiority. Everything was in the Dutchman's favour until a change of wind went against him, while the shore batteries that had been erected round about Deal gave very welcome support to the British who were finally able to beat off the attack. Turning North to destroy Blake, Tromp's fleet was scattered by a gale and he returned home to be disgraced by the republic.

De Ruyter.

In Tromp's place Michiel de Ruyter, the greatest seaman of his day, was appointed Admiral. In him the Dutch certainly had a wonderful leader and his virtues almost make one forget the injustice done to Tromp. At that time, as on many other occasions in its history, the Dutch Navy was very severely handicapped by politics and De Ruyter was always very careful to keep out of them, at least in connection with his public work. His first action was against Ayscue off Plymouth in August, 1652, when he was escorting a big fleet of merchantmen clear of the Channel. A ding-dong battle ensued which appears to have been nothing better than a series of stubbornly contested single-ship actions, but De Ruyter certainly got the better of the day by being able to continue his work of convoying the merchantmen while the British were too badly damaged to pursue. Our Rear-Admiral Pack was killed by a round shot and was a heavy loss to the Fleet. Almost immediately afterwards Ayscue was relieved, which appears to have been as much an injustice as was Tromp's case, but he had a good deal of advisory work afterwards and his undoubted ability was not altogether lost. Penn was given command of the Western Squadron and although he only had half the Dutch force he was quite willing to fight them, but De Ruyter managed to avoid the action.

The Battle of Dungeness.

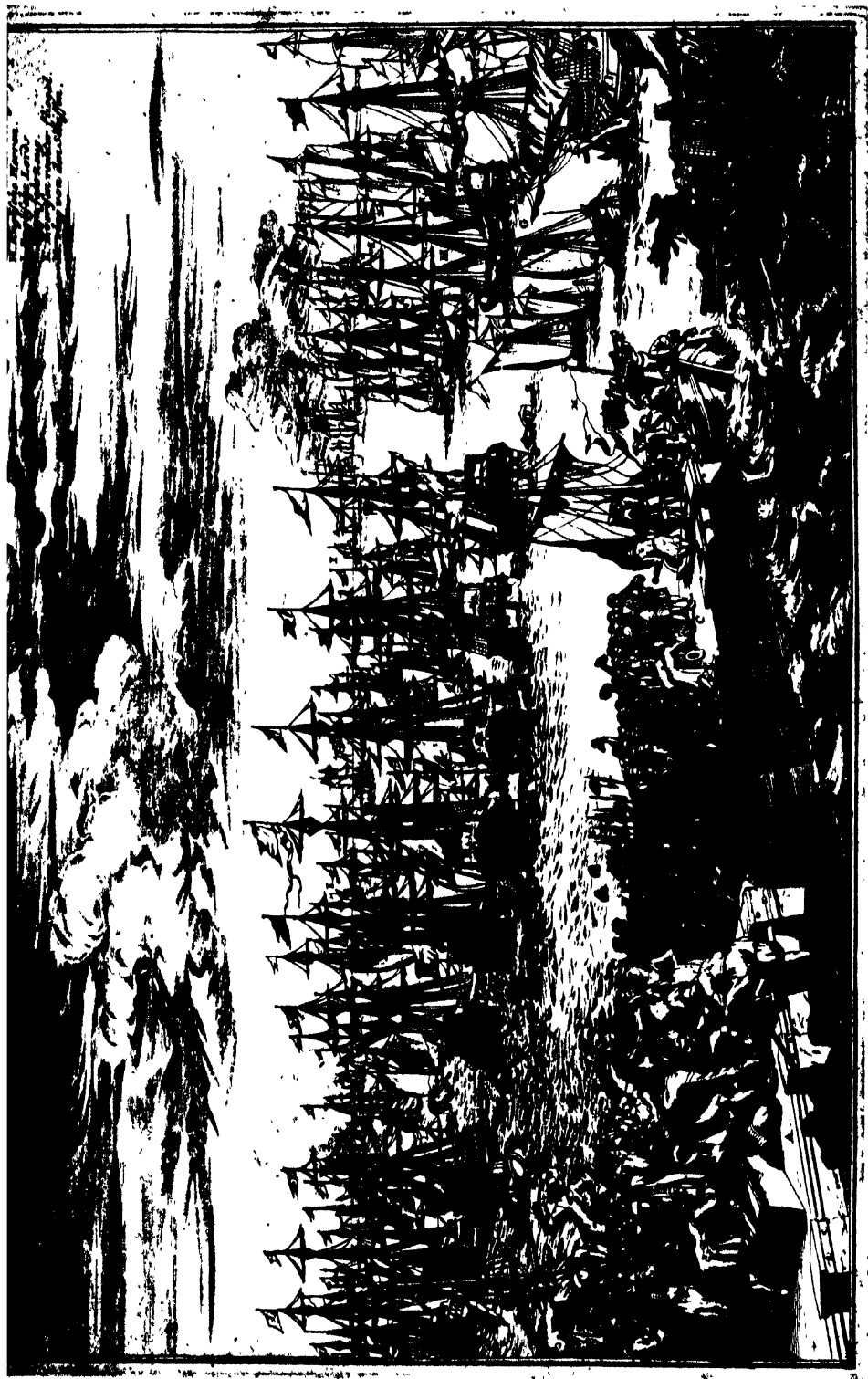
Kentish Knock was a very useful victory for us but it was not sufficient to justify the over-confidence which was immediately felt throughout the Fleet. Our cruisers brought in a large number of prizes and the Dutch were confined to their ports, but when the authorities decided that they were bound to sue for peace and demobilised the greater part of the Fleet accordingly, it was asking for trouble. At the same time the Danes entered into an active agreement with the enemy and were able to render them very considerable assistance. The Dutch were by no means beaten so badly that we could afford any demobilisation, and moreover the success of the British cruisers which were strangling the commerce that was absolutely essential to their country drove them to desperation. A huge convoy was therefore made up with a naval guard under Tromp and Jan Evertsen, De Ruyter acting as Vice-Admiral. This naval guard comprised seventy-three warships and small craft, while Blake in the Downs had under forty ships all told. Leaving his convoy inshore Tromp took his whole fleet round the Goodwins, causing Blake to weigh hastily and make off to the southward to avoid being caught in a trap. Unfortunately the batteries that had saved Ayscue had been dismantled and it is to this fact more than to any other that the ensuing disaster was due. The two fleets sailed along side by side until Dungeness forced Blake to stand out to sea and they came in contact. There could only be one result of an action between such ill-matched forces and to make matters worse a number of English captains avoided the fight, it being suggested that they were in the pay of the Royalists. At the end of the action we had lost the *Garland* and



(Macpherson Collection)

MICHIEL DE RUYTER (1607-1676)

Considered by many to be the equal even of Nelson, De Ruyter was certainly the greatest Admiral the Dutch ever possessed, but in spite of being the premier tactician of his age he was always the simple sailorman. His leadership marked a new era in fighting at sea.



WILLIAM OF ORANGE AT BRIXHAM, 1688

Having undermined the moral of the Navy with politics, James II found it the instrument of his undoing and the success of William of Orange.



(Macpherson Collection)

BATTLE OFF BEACHY HEAD, JUNE 30TH, 1690
(ENGRAVING BY SKELTON AFTER GUDIN)

*Forced to meet the French fleet with an inadequate force,
Torrington withdrew in masterly fashion and prevented the
victors achieving anything material.*



THE BATTLE OF BARFLEUR, MAY, 1692

With a greatly superior force the English routed the French fleet at Barfleur, but the victory had to be completed at La Hogue. (From a print lent by Messrs. T. H. Parker)

Bonaventure, taken after gallant defences, and three ships sunk, while one Dutchman had been accidentally blown up. Blake was very lucky to be able to get back to the Downs and felt the defeat bitterly, but the Commonwealth authorities were big enough to realise where the blame lay and refused to accept his resignation.

The Broom and the Whip.

There is a popular legend to the effect that after this action Tromp hoisted a broom at his masthead in order to indicate that he had swept the sea of the British and that after the Three Days' Fight in the following year Blake hoisted a whip—later to become the pendant universally worn by men-of-war—to show that he had whipped the Dutch off the seas. There is little doubt that Tromp did fly a broom at the masthead when he returned to port, but the popular explanation is wrong. He had captured a number of prizes during his cruise and was naturally anxious to sell them. The age-old sign of a ship for sale is a broom at the masthead and he hoisted it. As for the pendant being Blake's whip, it was worn by men-of-war many years before his time.

The Battle of the North Foreland.

About this time the Navy was very hard pressed for men, for although the rates of pay were infinitely superior to those established under the Royalists, there was nearly as much delay in getting it and therefore the result to the seamen was practically the same. This trouble over pay caused constant discontent and led to a large number of men deserting to the Dutch. Some of these were renegades pure and simple, but some salved their conscience by maintaining that they were fighting in the Royalist cause. As time went on and the position of the Commonwealth became more secure this evil was reduced. Meanwhile negotiations for peace were once again opened, but as they were still on the same unsatisfactory basis that Holland should be put more or less under British influence they were dropped and the Netherlands set about concluding a secret treaty with France. Meanwhile Tromp got together another fleet to convoy the outward bound merchantmen and although Monck crossed the Channel to meet him the two forces missed one another and the British had to be content with cutting up the Dutch fishing and coasting trades. The Dutch were equally disappointed when they failed to find a British fleet in the Downs or Dover Roads, and they suffered a good deal of damage from the guns of Dover Castle. Meanwhile the English at Yarmouth had received notice that the Dutch were in the Straits of Dover and hurrying south met the Dutch, who were making north, off the North Foreland. Tromp had ninety-eight men-of-war and six fireships against Monck's hundred and five, so that the forces were remarkably evenly matched. It was one of the first actions in which a big effort was made to carry out some sort of tactical scheme, both Penn and Tromp showing that they had a very tolerable idea of the principle of fleet handling. Things had changed very much since the Spanish Armada, when two

schools of fighting were in opposition—the British determined on cannonading and the Spanish on boarding if they could only get a fraction of a chance. Fighting at the North Foreland was just as stubborn and gallant on both sides as it had been in all the other actions between the British and the Dutch. Politics had worked their canker in the enemy's fleet, however, with the result that part of it began to give way and although Tromp fired into the fugitive ships his effort produced very little effect. By nightfall the enemy were off Ostend totally routed while the English had not lost a single ship, although their casualties had been heavy and included Deane. We captured eleven ships and their other casualties were believed to have been six ships sunk and two more blown up, although these latter figures are a little uncertain. As a result of this victory England was able to maintain a rigid commercial blockade of Holland.

Subsequent Operations.

This blockade of the Dutch coast meant more to Holland than any action. Blake was ill and Monck was in command of the fleet with Penn as his colleague and Lawson and Badiley of Mediterranean fame as his subordinates. Peace negotiations were again proposed but they came to nothing, and in the middle of 1653 Tromp slipped out of the Maas with a fleet intending to join another fleet from the Texel, under De With. There was a partial action fought off Katwijk without any decisive result, but drawing the British blockading fleet away and letting De With slip out. The two Dutch fleets joined off Scheveningen and once again there was a ding-dong battle. But it was a disastrous one for the Dutch, for Tromp was killed by a chance musket ball on his quarter-deck in very much the same fashion that Nelson died at Trafalgar. It was decided to keep his flag flying and to hide the catastrophe, but the Dutch were beaten and after sustaining very heavy losses retired in disorder. The English casualties were heavy, including a number of captains, but the enemy lost something like twenty ships and a huge number of men.

Tromp.

Martin Harpertszoon Tromp was undoubtedly one of the greatest seamen of his age. He was born in 1597 and had salt water in his blood, for he went to sea in his father's ship before he was ten and was in action almost at once. His genius and outspokenness were often against him and in 1629 the Dutch Admiralty suspended him for putting forward suggestions for the reformation of naval administration and discipline. In an emergency, however, they were glad enough to have him back and he soon made himself the terror of Holland's enemies. He and Blake were worthy foemen but the curious thing is that they had a very strong personal regard and even friendship for one another, and while they fought hard they remained on terms of the utmost courtesy. His death in action by a chance bullet was a disaster to Holland, for his men worshipped him and would follow him anywhere,

while in addition he had something of the genius of a Nelson and never lost his head either in victory or defeat.

British v. Dutch Ships.

In the hard hammer-and-tongs fighting of the Dutch Wars one cannot help noticing how many ships—especially Dutch—foundered as a result of gunfire, which was a rare thing before. This is partly explained by the fact that the Dutch ships were built for speed and seldom had the least difficulty in getting away from our lumbering wagons which one authority describes as being so clogged with timber that there was no room for stores. It was said that the British built their ships to last seventy years and the Dutch seven. On the other hand this proved to be an advantage in action, for many a time we contrived to sink a Dutch ship long before we had knocked the fighting spirit out of her men.

CHAPTER VII

The Navy of the Restoration

The Second Dutch War.

Both Charles II and his brother James, Duke of York, were enthusiasts on naval matters and moreover they saw the situation far more clearly than their father had done. All his interests were in material, but they thought of personnel as well and the Restoration was the beginning of a new era in naval matters. Soon after Charles returned, a new Navigation Act was passed that hit the Dutch even more severely than its predecessors. They were not in a position to reply at once, although the trouble that culminated in the Second Dutch War really began almost immediately after the Restoration. For some time it was a question of outrage and reprisal, but when Holmes sailed across the Atlantic and captured New Amsterdam, re-named New York in honour of the Duke, it was felt that things were getting serious. The Dutch agreement to co-operate with the English against the Barbary corsairs and their sudden withdrawal led to very bad feeling and war became inevitable. The Duke of York was Lord High Admiral with Sir William Penn as his Captain of the Fleet, while Prince Rupert, Sir John Lawson, Sir Christopher Myngs and Sir George Ayscue had subordinate commands and the British Fleet, being prepared first, sailed across to the Texel to blockade the Dutch. De Ruyter was away on the African coast and the command of the Dutch Fleet was accordingly given to Admiral Obdam with numerous subordinate Admirals. As far as material went the fleets at sea were roughly equal, but if there was any advantage it lay with the British.

The Battle of Lowestoft.

Hostilities proper commenced with the capture of an Anglo-Hamburg convoy by the Dutch, which brought a considerable value into their coffers and gave them much needed encouragement at the outbreak of war. At the same time it handicapped us badly because for the outfit of our fleet we were very largely dependent upon the naval stores that were taken. The Duke of York's squadrons which had come in for refit were immediately hurried to sea again and had they been possessed of a better intelligence service they would have discovered that the Dutch Fleet was not by any means perfect and that the quality of both ships and men was very suspect by their Admiralty.

The British Fleet was anchored in Southwold when it was reported that the enemy was off Lowestoft and the Duke immediately weighed to engage. The Dutch Fleet was very scattered, but Obdam collected them skilfully to meet the British attack which came up with Prince Rupert in the van, the Duke of York in the centre and the Earl of Sandwich (Montague) in the rear. At the very outset the battle degenerated into a mêlée, but the British and Dutch flagships singled one another out and commenced a hammer-and-tongs action in the old style. Things were going very badly for the Duke of York when the Dutch flagship suddenly blew up and only five men out of her crew of over four hundred escaped. The Dutch ascribed this disaster to treachery but there is little doubt that it was an accident. After this they had but little chance and Sandwich completed their discomfiture. The fact that the Duke did not follow up the victory as he might have done and so convert the retirement into a rout, caused very considerable comment in England, for it was felt that had he possessed the energy of some of his subordinates the war might have been ended at once.

The St. James's Day Fight.

This famous action, which took place off the North Foreland and is sometimes known as the second battle of the North Foreland was fought on the 25th July, 1666. The British Fleet under the joint command of Albemarle and Prince Rupert was gathered in the Thames Estuary, while a slightly superior Dutch Fleet was under De Ruyter. The enemy planned a landing on the British coast and had taken a large number of soldiers, but they realised that it was impossible to carry out this plan while our fleet was still in being and accordingly they were disembarked before the action. One of the things for which it was conspicuous was a confirmation of the point that had shown itself in the Four Days' Fight, that the British seamanship was rapidly improving and that the ships kept magnificent station considering the circumstances. Once again the Dutch showed the evils of divided command and the most powerful of their squadrons was detached by a smaller one of ours, causing great confusion. Then the Dutch centre gave way and although finally De Ruyter conducted a masterly retreat he lost a number of ships and finally only got a shattered remnant into the shelter of the shallows.

The Third Dutch War.

After the Peace of Breda the Navy lapsed into an exaggerated peace routine which sapped the whole efficiency of the Fleet. In 1670, however, Charles II signed a secret treaty at Dover by which he agreed to lend the Navy to Louis XIV for his purposes against the Dutch, a disgraceful proceeding which was disastrous to our interests. Louis XIV meant to make France territorially the same as ancient Gaul, with the Rhine as its frontier, and Charles set about helping him, forgetful of the appalling danger to England of a French Rhine Delta. The determination of the Dutch had prevented his capture of Antwerp threatening

us in the way that it might have done, but Louis was not contented and hired Charles to cut his own throat. The fleet which put out to his assistance in 1672 was under the command of the Duke of York with D'Estrees as Second in Command of the French contingent and Lord Sandwich as Rear-Admiral. It is an ignoble fact that the French had no intention of risking their infant navy more than was absolutely necessary, and the presence of a French force was really for no other purpose than to make sure that England earned her pay.

The French Privateers.

During the latter part of the war, and especially after their main fleet had been routed at Barfleur and La Hogue, the French made the greatest use of their privateers. They sailed from all the French ports, but especially those facing the Atlantic and Channel, in scores, and made a huge difference to the course of events. The British could ill spare sufficient cruisers to counter them and although the losses by privateer action were not as serious as those sustained in later wars, they were quite sufficient, especially considering the sad state of the country, and caused very considerable embarrassment. Similarly the smugglers had their effect on the course of the war, because it was entirely by their help that the Jacobites in France were able to keep in touch with the party in England and also because William, already embarrassed in money matters, found himself in further difficulties owing to their draining the country of gold to pay for their contraband goods.

CHAPTER VIII

Ships and Seamen

The Development of Ships and Seamen.

In the preceding chapters the history of the British Navy and its neighbours has been traced from the earliest days to the end of the seventeenth century, but only the barest necessary mention has been made of the development of material which made this history possible. In the present chapter this development is traced out during the whole period, as the most striking points have to do with men-of-war rather than with merchantmen. This means getting ahead of our story in many places, but that can scarcely be helped in the circumstances.

The Prehistoric Dug-out.

While the Phœnicians were building quite ambitious ships in the Mediterranean the Ancient Britons appear to have been navigating dug-outs which, excessively primitive as they were in form and construction, must occasionally have been astonishingly big. The most celebrated of these ships is the one that was dug up in the Spring of 1886 at Brigg in North Lincolnshire, where it had apparently been buried in the clay beach of a lake since some unascertained date between 700 and 1,000 years B.C. This giant dug-out, made from the trunk of a single tree, bears no sign of having been touched with iron, and it is probable that it dates from the Stone Age. As being the earliest boat of which we have actual practical knowledge its dimensions are interesting—a length of 48 feet 6 inches by a 6-foot beam and a depth of 2 feet 9 inches. The bow is rounded off and may conceivably have been used for ramming, while the stern is shaped in a manner strongly suggesting the modern counter. The oak from whose trunk it was hollowed must have been a colossal tree. The sides when found were about two inches thick and the bottom four inches but the stern was heavily built and had a thickness of no less than sixteen inches, the purpose of which must remain a subject of speculation. The stern itself was separate from the boat, the join being grooved and caulked with moss, and one can only suppose that it was once lashed to the hull with some sort of thong. In those days she was probably propelled with paddles rather than oars, and although there is no sign of a mast there is a succession of small holes close to the gunwale for practically the whole length of the ship, which may have been for the rigging but might equally well have been used

for mats such as the Phœnicians are believed to have used before they took to planking, shields, or an awning. A leak in the bilge on the starboard side has been repaired with wooden patches and moss caulking, secured with wooden pins and thongs. This boat was offered to the British Museum but it was too big to be housed there and may now be seen at Hull, the most perfect specimen of her type yet discovered, although other somewhat similar ships have been dug out in various places in Britain and also on the German coast. The biggest appears to be the one discovered on the borderland of Kent and Sussex rather more than a century ago, which was 63 feet long by 5 feet beam.

Ptolemy's Yacht.

Some record has come down to us of the gigantic yacht built for King Ptolemy of Egypt somewhere about the year 150 B.C. According to Greek authorities she was 420 feet long by 56 beam, 80 feet deep from the keel to the top of the poop, had two prows and seven beaks, and was propelled by forty-eight rowers whose longest oars, 56 feet in length, had leaden looms in order to balance them better. She also carried 400 personal servants and 2,800 mariners and soldiers, but it is more than doubtful if she ever put to sea. It is said that she could only be launched by a wonderful mechanical contrivance invented by a Phœnician and many unconvincing attempts have been made to illustrate her probable appearance.

Phœnician Ships.

It is suggested that the Phœnicians first learned the art of ship-building in the days when they lived in the Persian Gulf, and that the idea of planking came when the dug-out canoe was in danger of being swamped and was saved by the use of strips of bark or mats. In their earliest recorded days in the Mediterranean they had carried the science well forward and were navigating sizable vessels which were carefully designed and constructed. The age-old fear of being pooped by a following sea led to the high stern which survived for centuries, and in bad weather they would always turn and run before it. For caulking between the planks they used fibre and mortar, and they knew the use of both metal bolts and trenails. The single mast was amidships and the crow's nest appeared early for the better convenience of the pilot. The sail was originally simply a square and was used for running only; otherwise the ship depended upon her oars. The Phœnician method of manning the oars does not appear to be recorded, but one can understand the difficulty of getting slaves when they were not naturally a fighting nation and desired to keep on good terms with every possible customer. It may have been that the oars were for free men as in the case of most Viking ships but that is not altogether likely, and there is also the theory that their rowers were often their debtors. The question of the arrangement of the oars and the numerous banks is a subject for infinite argument and nobody has satisfactorily settled the question, but it is certain that some big galleys had surprisingly large crews. It is



(Macpherson Collection)

THE BATTLE OF LA HOGUE, MAY, 1692
(AFTER THE PAINTING BY BENJAMIN WEST, P.R.A.)

After the British had made poor use of their opportunities at Barfleur, the remains of the French fleet were wiped out at La Hogue and the country was safe from invasion.



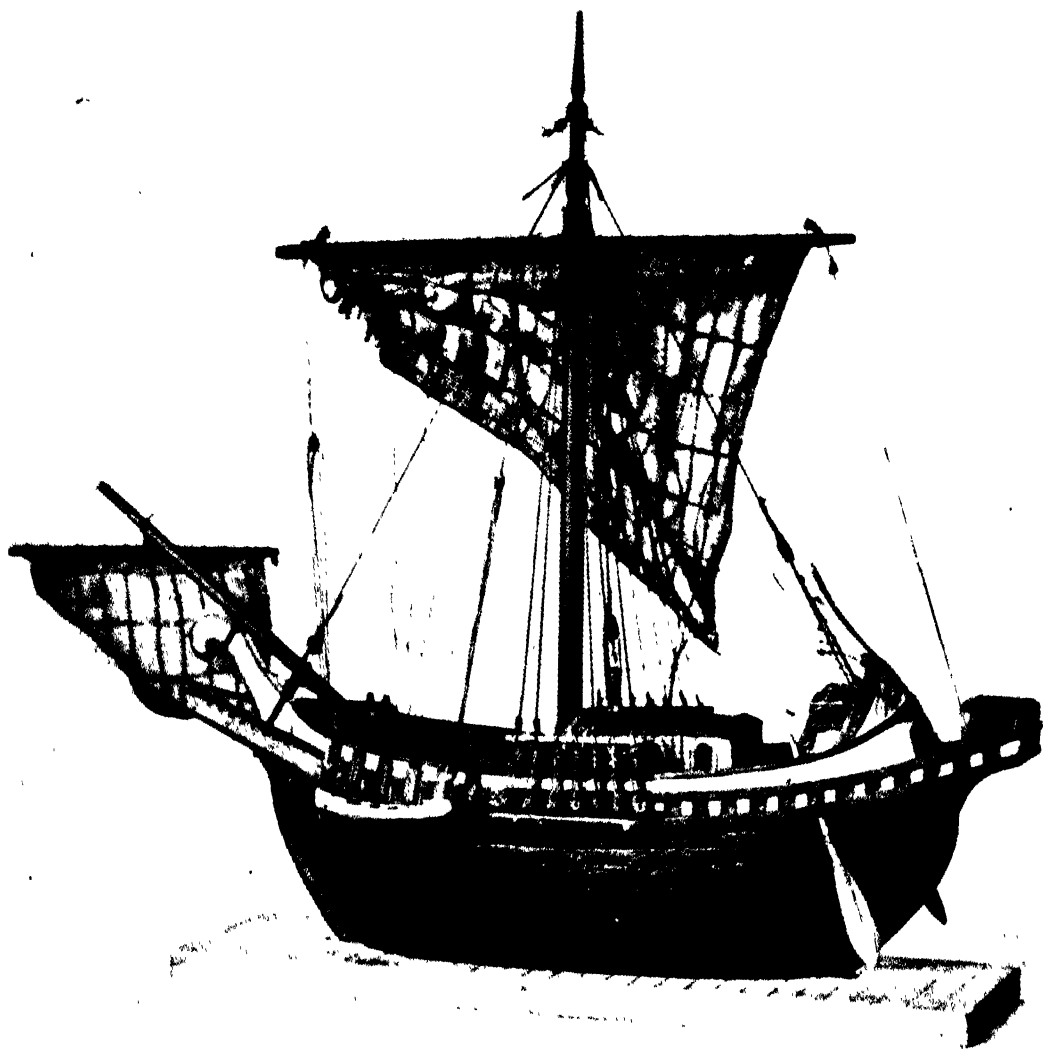
BOMBARDMENT OF DIEPPE, 1694
(FROM A CONTEMPORARY MEZZOTINT ENGRAVING BY R. ROBINSON)



(Macpherson Collection)

DUGUAY-TROUIN CAPTURING THE "NONSUCH," 1695

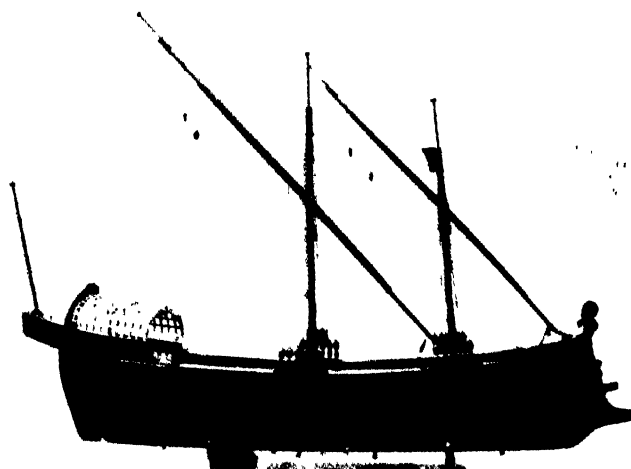
The great French corsair captain had many single-ship victories to his credit, but none greater than the capture of H.M.S. Nonsuch in 1695. He afterwards cruised in her as the Sans Pareil.



(Above)

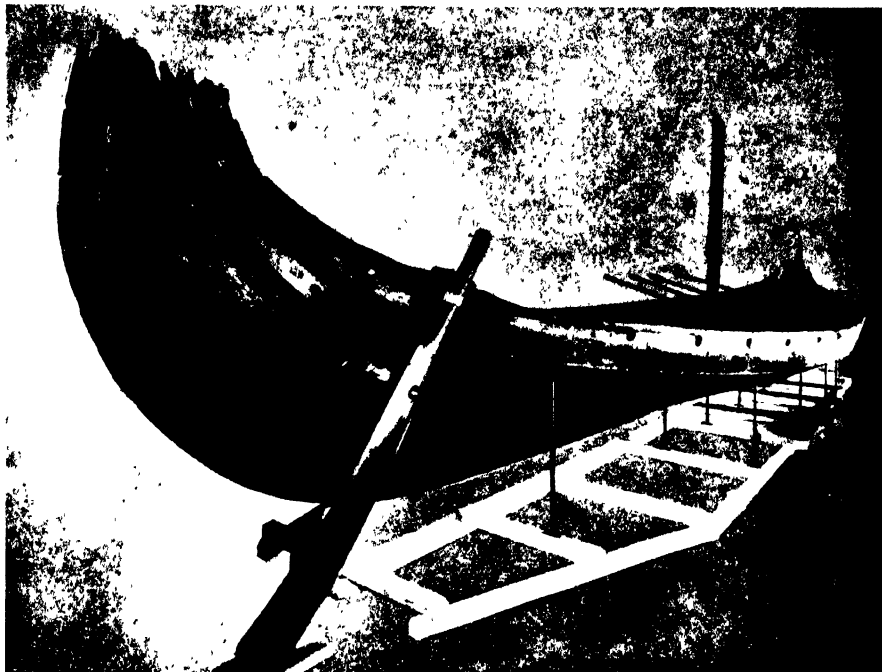
MODEL OF A ROMAN MERCHANT
GALLEY,

made by Dr. J. Sottas, of Paris.



(Below)

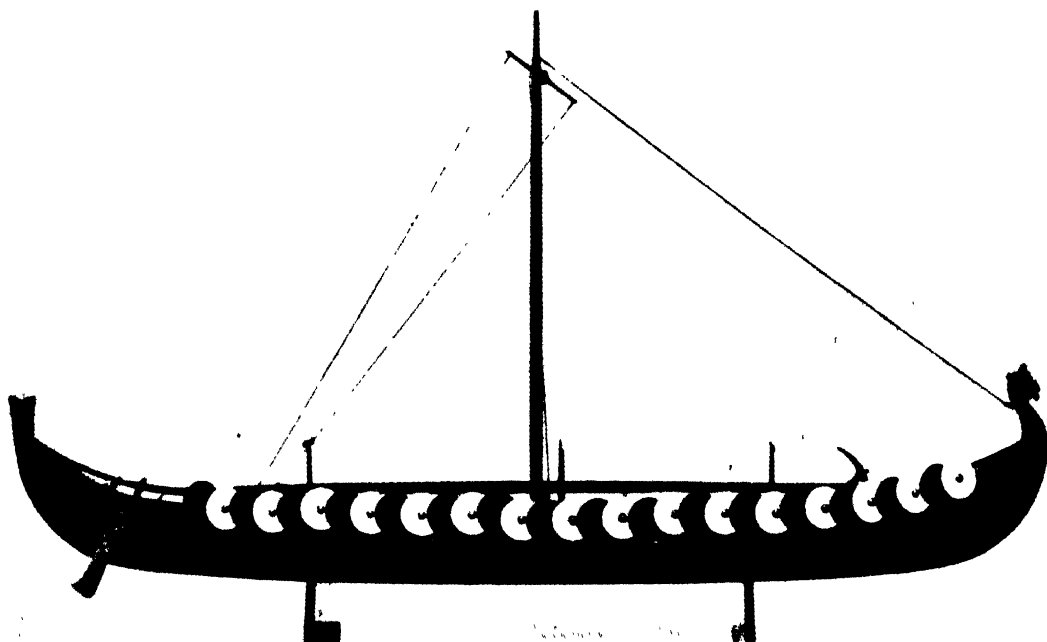
MODEL OF BIREME,
*of the type mentioned by Pliny, from
the Naval Museum at Madrid.*



THE OSEBERG SHIP

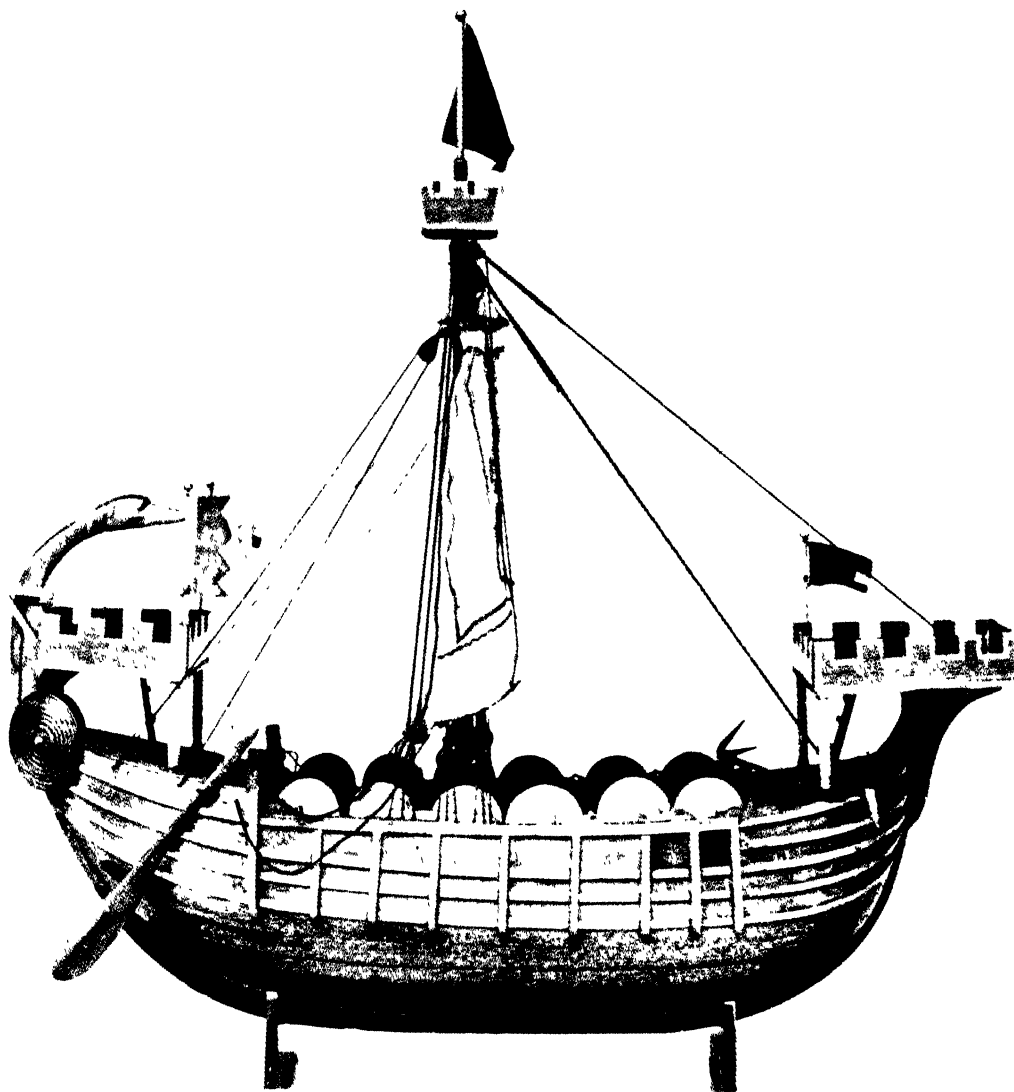
As she was discovered, showing the big beam and flat floors of the merchantman.

(By courtesy of the Norwegian State Railways)



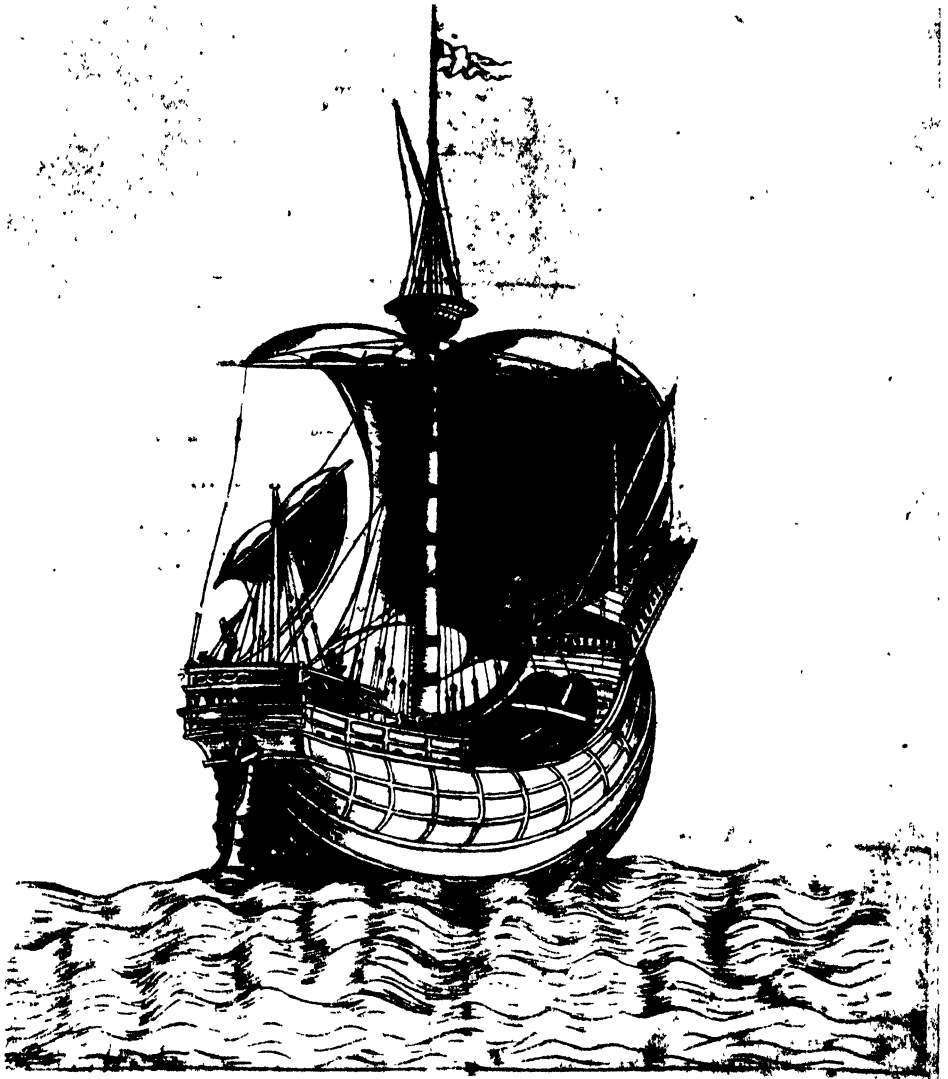
MODEL OF A VIKING SHIP

Based on that dug up at Gokstad, and believed to be typical of the medium-sized men-of-war.



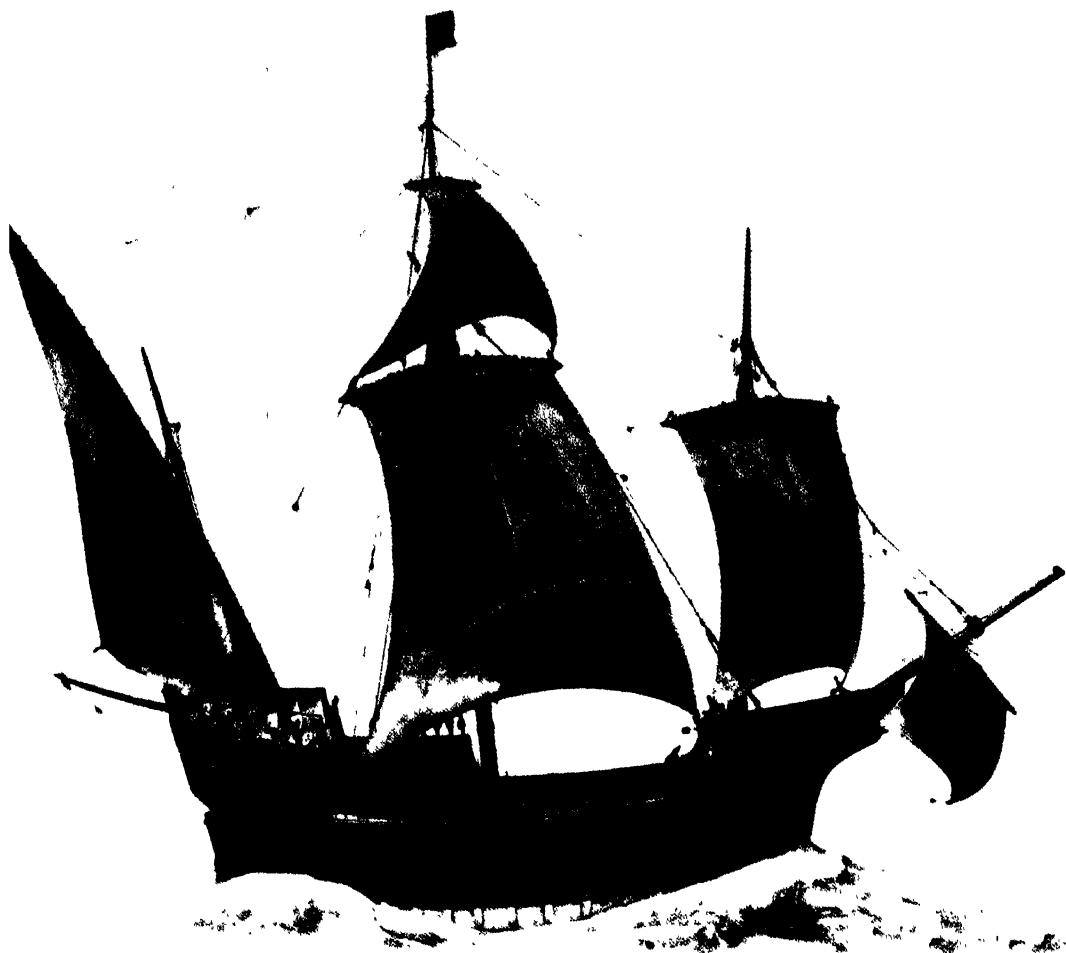
MODEL OF A KING'S SHIP OF THE LATE 12TH OR EARLY 13TH CENTURY

This model, from the Science Museum, South Kensington, shows the lightness of the fore and after-castles.



A 15TH-CENTURY TRADING SHIP

This illustration is from an engraving dated about 1470, of which the only impression now existing is in the Department of Prints at the British Museum.



MODERN MODEL OF THE "SANTA MARIA."

The Santa Maria was the flagship of Columbus in his great voyage of discovery. The manner in which the sails were increased by lacing bonnets to the lower edge is clearly shown in this fine model, made by Lt.-Col. Harold Wyllie.

(By courtesy of Messrs. Robert Dunthorne & Son)

impossible to reconstruct the heavy Phœnician merchantmen, but it may be mentioned that the speed of an early man-of-war trireme was estimated at a hundred miles per day, with a maximum of eight miles per hour for a spurt when all the watches were at the oars.

Viking Ships.

Luckily the Gokstad ship and others which have been discovered in somewhat similar circumstances, together with the very full literature of the people, have given us a very clear idea of what the Vikings' vessels were like, and this knowledge only increases our admiration of the work they performed in them. It is reckoned that this ship dates from about A.D. 900, which was a period when the Vikings were making long voyages. Most of the ships of this period are generally presumed to have had twenty oars aside—"Tyvesser"—while Olaf Tryggvason's *Long Serpent* had thirty, and one of the ships of Canute the Great had sixty. The Gokstad ship, however, which has a length of eighty feet and a beam of seventeen, has sixteen aside only—"Sextensesse"—which meant a crew of sixty-four rowers, and probably a total ship's company in the neighbourhood of eighty. She is clinker built of oak and fastened with withes of tree roots. There were no thwarts for the rowers, and they probably stood to their oars "North Sea Fashion," but on the other hand there are remains of bedsteads, carefully made to unship when necessary, for at least part of the crew. She had very fine lines forward and aft, with a tremendous sheer, and it is an old Norse superstition (although it probably dates from long after this) that the Devil taught a shipowner that extra seaworthiness could be obtained by this big sheer on the stipulation that he should have every seventh ship that was built. The shipowner prospered and lost count, with the result that his children and all that he held dear went down in one of the seventh ships that were lost. A single mast is stepped amidships with a big square sail very much after the same fashion as it was in Phœnician days. The steering paddle is on the starboard side of the ship aft—hence the name—but in bigger vessels there were certainly more than one.

One nearly always associates the Vikings with war and discovery, but they used their ships for trading, too. The ship which was found at Oseberg was far flatter and broader than the Gokstad ship, and was probably a merchantman. It is recorded how Harek of Thjotta, meeting a Danish ship in 1018 and feeling little inclined to give her the chance of putting up a big fight, struck his mast and sail, put a tent cloth over the waist, and hid the greater part of his crew under it: then with a few rowers at either end his craft looked such a tempting morsel that the Dane, who was just as big a pirate as he, came within boarding range and was promptly captured.

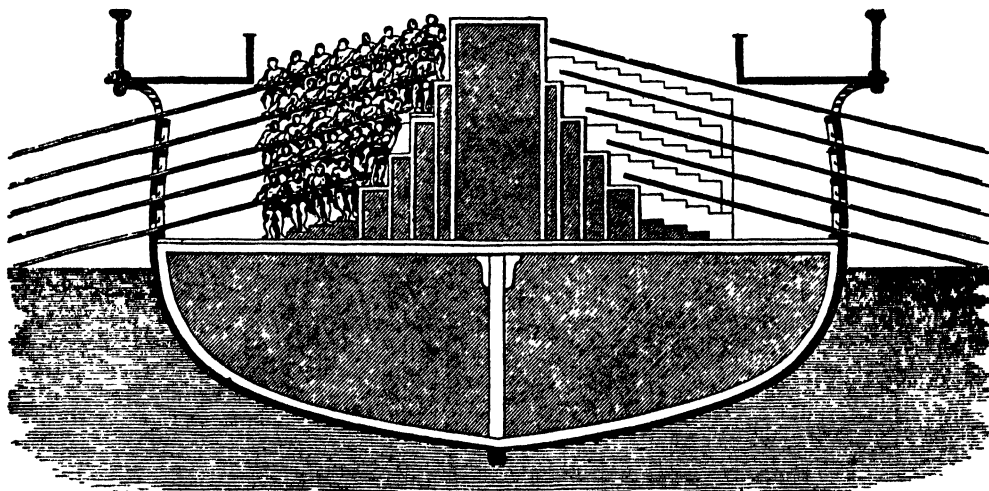
British Ships.

The only British ships that are specially mentioned by the ancient writers are the coracles which survived in Wales for an extraordinarily long time. They were as primitive as they well could be, just a sewn

skin stretched over a wicker framework, but it is from them that we get many of our shipbuilding phrases of to-day—the skin, the seams, etc. However, it is certain that the neighbouring shores of Gaul had quite fine ships and did a big trade with Britain, so that it would be surprising if the islanders had not copied them to some extent at least. In Cæsar's time Britain was in a position to send a fighting fleet to the assistance of her friends the Veneti on the mainland and lost every ship in the process. Where the seamen came from is a mystery, for the Britons do not seem to have taken very kindly to the water, and from their subsequent history they probably hired the men from abroad. In addition to the ordinary warship, Cæsar discovered in Britain another type of vessel which, ever quick to adapt other people's ideas to his own military requirements, he added to the Roman fleet as the *Picta*. It was a long, fast, pinnacle of light construction propelled by some score of rowers and carrying the usual square sail. For despatch carrying and scouting it was a great advance on anything that he possessed, although one may safely guess that its inventors used it for a rather less reputable purpose. Sail, hull, and the clothes of the crew are reported to have been coloured blue to make it less conspicuous, and for speed the hull was covered with a coating of wax.

The Galleys.

Although in the early days all ships were propelled with oars a galley is a type which belonged essentially to the Mediterranean, just as it did for several centuries afterwards. Generally it was a long narrow vessel, from five to ten beams to the length, and its exact construction has been the subject of endless argument. There is reason to believe that the earliest galleys were paddled instead of rowed and from this the natural development is the single-bank galley, somewhat after the same fashion as the Viking ships. There are records, how-



TRANSVERSE MIDSHIP SECTION OF A QUINQUEREME.

(From Lindsay's "History of Merchant Shipping." By courtesy of Messrs. Sampson Low & Co.)

ever, of galleys with an extraordinary number of banks and it has always been a problem as to how they fitted them in. Ptolemy Philopator, for instance, is reported by Athenæus to have possessed the wonderful galley already mentioned, over 400 feet long, rowed by 4,000 oarsmen, but how they were fitted in has never been satisfactorily explained. Triremes were the most popular type of man-of-war galley, analogous to the 74-gun ships of later days, but there were also numbers of quinqueremes with five banks of oars. Perhaps the most likely arrangement of these rowers is that given by Lindsay and reproduced herewith.

The Vikings rowed standing up, but in the Mediterranean the men probably remained seated in the small galleys, although in the bigger ones they had to rise, move forward as far as possible, and then throw themselves back into their seats as regularly as they could. The regularity was obtained by either vocal or instrumental music, and here we have the beginning of the shanties which became so universal in sailing ships. It is recorded that some of these galley slaves would row for twenty hours at a stretch, having bread soaked in wine pushed into their mouths as they continued their work.

Greek Fire.

Fire has always been the most terrible weapon in fighting at sea from the very earliest ages of naval warfare. Nearly four hundred years before Christ the Greeks had a mixture of sulphur, pitch, charcoal, incense and tow, which they took in wooden vessels, lit and threw on to the decks of their enemies. In the early decades of the Christian era, however, a very much more terrible weapon came into being, which was known as Greek Fire. Its exact composition was kept a very close secret and is a secret still, but it is understood that in the reign of Constantine, somewhere about the year 650, an architect named Callinicus who had fled to Constantinople, prepared a mixture which enabled the Greeks to throw out a stream of liquid fire and that by its aid the ships of the Saracens were set on fire at Cyzicus and totally routed. The mixture was also known as Sea Fire, and later Wildfire, and the possession of its secret proved to be of very great value to Constantinople on many occasions in its chequered history. It was not the only incendiary mixture of the period but it was by far the most effective, and it is believed that its great feature was quicklime which took fire spontaneously when wetted. The mixture was placed in a wooden tube covered with bricks and was projected by putting a hose attached to a pump into the breech. Its use did not really end until the introduction of gunpowder.

The Norman Period.

As has already been shown in the military section, the fighting ships of the Norman period were only an adaptation of the Viking ships of a couple of centuries before, propelled by oars and a single square sail and not even having the topsail which the Romans certainly knew many centuries previously. The merchant ships were beamy and full and

were similarly copied from the Norsemen. Little is actually recorded about the seafarers of the time, but it would appear that seamen had to be sought principally among the numerous fishermen of the coasts until the rapidly increasing trade between England and the Continent brought into being a sufficient number of professional merchant seamen.

The Laws of Oleron.

The earliest known English effort to codify the laws of the sea, early recognised to be necessary owing to the conditions of life on ship-board, are known as the Laws of Oleron and are believed to have been enacted owing to the efforts of Queen Eleanor of Aquitaine, the wife of Henry II. She is said to have got the idea of observing the discipline maintained in Levantine ships on her way to the Crusades. Her son, Richard, in the course of his Crusade realised their value and improved on them, enacting that they should be observed as law. The earliest edition, which is still in existence, preserved in the Guildhall in London, is believed to date from the early part of the fourteenth century, but about one hundred and fifty years later there was a very much bigger collection issued in France. They seem to have thought of everything, from punishment for blasphemy or breaches of discipline down to the victuals of the crew. They put a legal end to the contention that all shipwrecked vessels became the property of the finder—a natural incentive to wrecking—and to prevent pilots acting as accessories the laws provided that if one ran his ship ashore and merchants sustained any damage they had the right of redress from his estate and that if this were not sufficient the crew had the right to behead him on the spot. Any landsman who, in order to gain possession of shipwrecked goods, “should murder or destroy poor shipwrecked seamen” had to expect to be immersed in the sea until he was half drowned and then stoned to death on the shore.

Mediterranean Ships.

There can be no doubt that in the early days the Mediterranean ships were far more highly developed than ours, although they were built for comparatively calm waters while ours had to face the North Sea and Atlantic. When Richard I was on his way to the Crusades in 1191 his fleet met a huge Turkish ship with three masts and carrying 1,500 men, and the whole fleet had their work cut out to sink her, finally sending her down with her flag still flying. Her sides were far too high for her to be boarded from the English ships, which were nevertheless big enough to carry their people through the Bay of Biscay. It was many years before a ship was built in England capable of carrying 1,500 men.

Seamen's Affrays.

The earliest history of Britain was certainly a succession of tribal affrays and when ports had been established round the coast there is little doubt that the custom remained and that there was a good deal

of raiding and counter-raiding within the country. In particular the men of the Cinque Ports began to get a very bad reputation for attacking the French at every opportunity from the very beginning of their history, and the fact that it was regarded as a somewhat venial offence is shown by the special order of 1293 in which they were solemnly warned to leave the men of Normandy alone, apparently being left quite at liberty to do what they could against other Frenchmen. Soon after, however, so many affrays occurred between British, Flemish, Portuguese and Bayonnese seamen that special commissions were told off to deal with them, although they still went on. Later we came to a definite treaty with Bayonne and Flanders which established regular grades of seamen's quarrels and provided for punishment. A murderer was executed and anybody who maimed another was mutilated in precisely the same fashion. The fights still continued, however, intermingled with piracy and national quarrels.

The Mariner's Compass.

The original invention has been attributed to Chinese, Arabs, Greeks, Etruscans, Finns and Italians. It is claimed that the Emperor Huan-Yuan in the year 2634 B.C. got through an artificial fog raised by the enemy by constructing a chariot which indicated the South, but this is believed to be purely mythical. The first genuine record of a Chinese marine compass is in A.D. 1297. The claims of the Arabs are discounted by their eagerness to buy European compasses. The first definite mention of a mariner's compass comes from Alexander Neckham in the twelfth century. In those days a magnetic needle was floated in water on a stick or straw. The Norwegians were certainly using the compass in the middle of the thirteenth century. The compass card really originates from the ancient "wind rose" of ancient Athens on which the North Wind, Tramontano, was marked with a spear head in addition to the initial "T." This eventually developed into the Fleur-de-Lys that has lasted since the end of the fifteenth century. Therefore it would appear that the Chinese have very little credit for the invention, while Roger Bacon only put down his notes on paper.

Henry III's Ships.

The account that has come to us of the action in the Channel in which Hubert de Burgh defeated the French shows that by Henry III's time a considerable improvement had been effected in naval architecture, probably as a result of observing the superior Mediterranean ships during the Crusades and adapting some of their features to Atlantic requirements. His ships in this action appear to have had two tiers of oars with a platform along each gunwale over the heads of the rowers for the accommodation of the soldiers, with their shields hung on the bulwarks before them. The mast-head had the usual circular top filled with bricks, stones and iron bars, while the forward and after castles were the stations of the picked men of the soldiers on board who were employed both with their bows and for boarding. In the waist was at

least one catapult for throwing large stones. At the same time they appear to have been without pumps and leaked badly, with the result that according to one authority it was no uncommon sight to see "half the knights baling while the others fought hand-to-hand with the enemy."

The Size of Mediæval Ships.

It is customary to think of all merchant ships as being very small vessels down to the time of the Tudors, but it is certain that Edward III had at least one of 300 tons and a large number of 200 and over, which is not so small. At the same time Mediterranean ships ran considerably bigger, and in 1341 a pilgrim reported that he saw in Sardinia the greatest ship in all the world which hailed from Naples and was laden with 1,000 tuns of wine of the largest size and carried over 600 men. Considering that St. Paul's ship had 276 people on board in addition to her cargo, this is not at all improbable.

The Cog.

At the beginning of the French Wars the cogs came into notice, the biggest being of about 250 tons burthen. They generally carried two masts, with a single squaresail on each, and it was about this time that the custom became general of lacing bonnets to the bottom of the sail to increase its area in fine weather instead of reefing it in bad according to modern practice. The paddle fixed over the quarter had disappeared in favour of the rudder on the centre line. It was the placing of guns on shipboard that made the great difference in the size of ships.

Fighting Tops.

Tops seem to have been built on to the masts of ships from the earliest times, the ancient Phœnicians and Romans having a top for the accommodation of a pilot that he might the better see shoals and broken water. They soon came to be used for fighting purposes also, and in the Middle Ages darts and stones were thrown from the tops in English ships and "Greek Fire" from those in the Mediterranean. In the early days of the sixteenth century guns began to be mounted aloft, the *Great Elizabeth* of 1514 having six serpentes and a stone gun on her two tops, while the *Mary Rose* had six small pieces.

Shipbuilding Bounties.

The granting of bounties by the Crown for the encouragement of merchant shipbuilding was first mentioned in 1449 when special grants were made to those who would construct merchant ships of large size. During the next hundred years or so this was generally regulated at about five shillings per ton for all trading vessels of over a hundred tons burthen, but this was not always the case. One of the earliest cases of the bounty was in the instance of the merchantman *Grâce Dieu* of Hull, for which John Tavernor was granted certain privileges which must have been very valuable to him in the course of his trading.

Guns on Shipboard.

It has already been mentioned that in Henry V's reign the *Holigost*

was the most heavily armed ship of the British Fleet as far as guns were concerned, but that she only carried six pieces. The *Regent* of 1489, however, carried no less than 285 serpentines, all on deck, and although these guns were not, of course, large, and with their shot of only a few pounds were employed entirely as "murdering pieces" rather than for the destruction of material, it shows the hold that cannon had obtained. This artillery was designed practically entirely for defence against boarders, for which reason a large number were mounted in swivels on the bulwarks and on the rails of the forecastle and poop in order to sweep the waist of the ship if the enemy got a foothold in it. In the *Henry Grâce à Dieu*, which was built in 1514 to replace the *Regent*, there were mounted 122 iron serpentines and a large number of other guns of larger but remarkably various calibres. When she was rebuilt an effort was made to get something like uniformity into her armament, but her ammunition supply must have been heartbreaking to any gunner.

Fifteenth-Century Ships.

By the latter part of the fifteenth century ships were getting well on the way from the Mediæval vessels which were direct descendants of the Vikings to the Tudor ships with which we are tolerably well acquainted from contemporary pictures. The ships still had a big sheer forward and aft. The poop, generally hung round with shields which were then little more than decorative, was horizontal, while the long forecastle had a sharp sheer. The big mainmast, surmounted by a top and frequently having a topmast and topsail, was still placed amidships, which is as it was in Viking days, but by this time there had long been small masts both on the forecastle and poop. From the illustrations that are left to us, most of which are somewhat fragmentary and many of which are taken from stained glass windows in churches, it would appear that these ships must have been both slow and unhandy, but at the same time a distinct effort was being made to obtain more seaworthy qualities.

Progress of Shipbuilding in the Mediterranean.

Living entirely on their shipping as they did, it is not surprising that the Venetians and Genoese forged ahead in the matter of ship construction, far ahead of the English. As early as the middle of the fifteenth century it is reported that ships of 1,500 tons burthen were being built at Genoa but the most famous of them all was the *Santa Anna*, which was built for the Knights of Malta at Nice in 1530. She was the mightiest ship of her time and was of over 1,700 tons burthen. She had six decks, of which two were under water. Her armament consisted of fifty heavy guns and an "immense number of lesser ordnance." Against the great enemy of the shipwright of those days, the worm, she was protected by a thick lead sheathing which must have made her handle very sluggishly. Her crew consisted of three hundred men. Her whole history is not known, but she certainly took

part in the expedition to Tunis which Charles V led in 1535.

The Galleasse.

When artillery was placed on shipboard and the size of ships increased rapidly the Mediterranean powers evolved the galleasse, which in its original form was a large galley, decked both for strength and convenience, and carrying guns on its broadside among the rowers. It was a very inconvenient compromise, the reduced number of rowers being compensated by three tall masts carrying lateen sails, but it was a big step in the direction of the broadside men-of-war which lasted for centuries.

The Galleon.

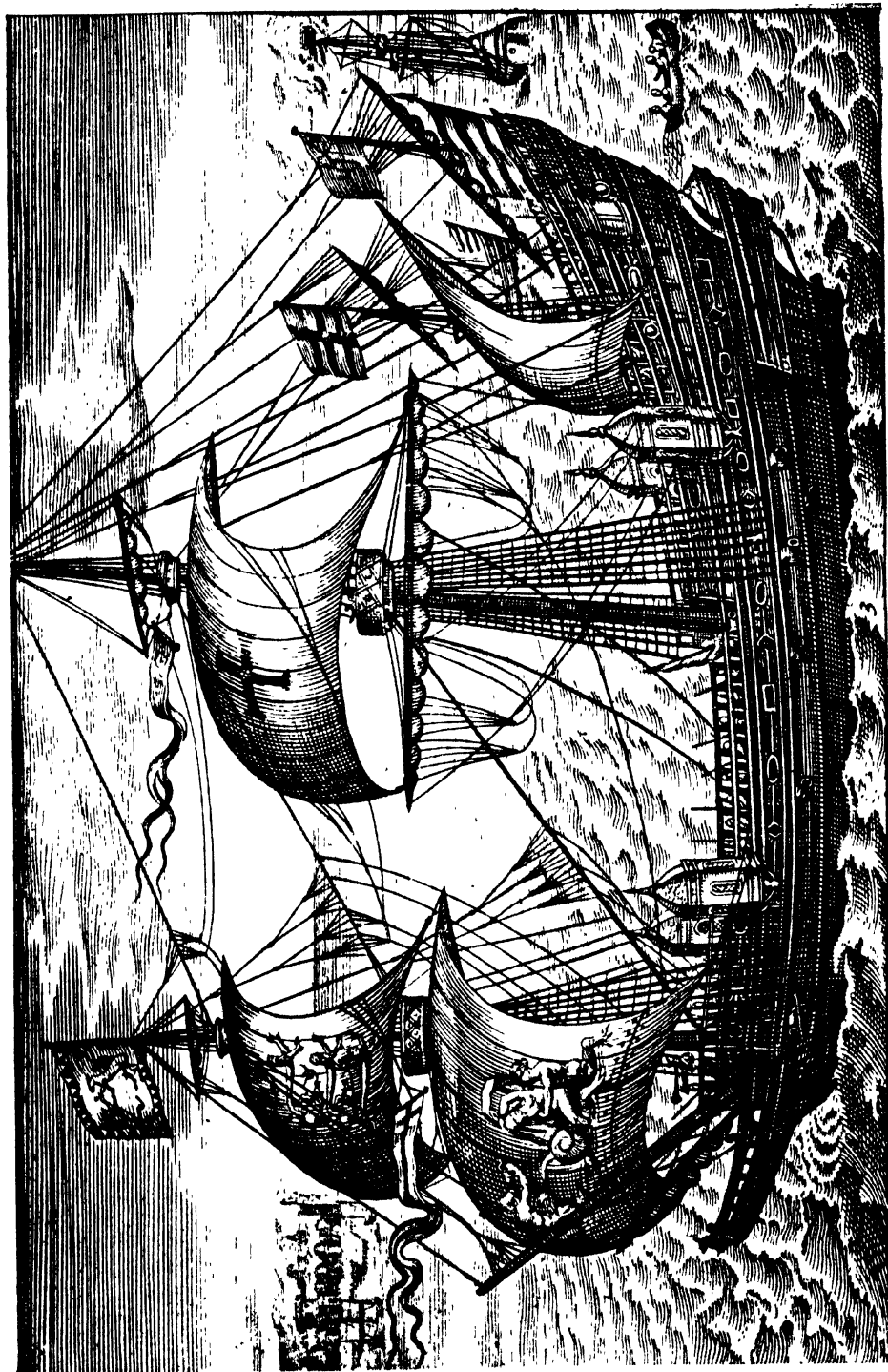
The galleasse was hopelessly unsuitable for Atlantic work and accordingly all the powers having a sea-board on that coast resorted to a new type which grew into the galleon. Instead of starting with the man-of-war which was the direct descendant of the Viking ship they worked up from the slow but seaworthy sailing merchantman and did without oars altogether. For greater strength and to keep their heavy guns as near to the centre line as possible these ships were built with sides that "tumbled home" very sharply, the deck being very much narrower than the water line. The fighting fore- and after-castles were built into the ship instead of being more or less independent structures, and the rig soon became very much more elaborate. It was the galleon type, adapted to British requirements by a general tendency to make it lower in the water, faster and handier than the Spaniards', that became the standard of British design, and right down to the end of the seventeenth century it was really only a matter of steadily developing this along what seemed and proved to be practical lines.

Discipline on Shipboard.

The punishments laid down under the Laws of Oleron already mentioned give a vivid insight into the life on shipboard at that time and we have full information of what things were like in the fifteenth century. Flogging was general, even for swearing, and under many flags the punishment for theft was to be tarred and feathered and then to run the gauntlet of the whole crew, to be finally dismissed the ship more dead than alive. The Spaniards prescribed a similar punishment for gamblers, although it appears to have had little effect in stopping the trouble. No better result came from the power of the Admiralty to cut out offenders' tongues. Keel-hauling was a quite usual punishment which grew from the still older one of ducking in the sea, and one must remember how foul and barnacled most ships were to realise in full the terrors of being dragged under the ship's keel with a rope.

The Construction and Repair of Ships.

In the early days it was customary to build a ship wherever a stretch of the river bank appeared to be advantageous for the purpose, when



(Macpherson Collection)

THE "ARK"

This ship, also known as the Ark Royal and the Anne Royal, was originally built for Sir Walter Raleigh, but taken over by the Elizabethan Navy. The enormous sheer of the stern and the



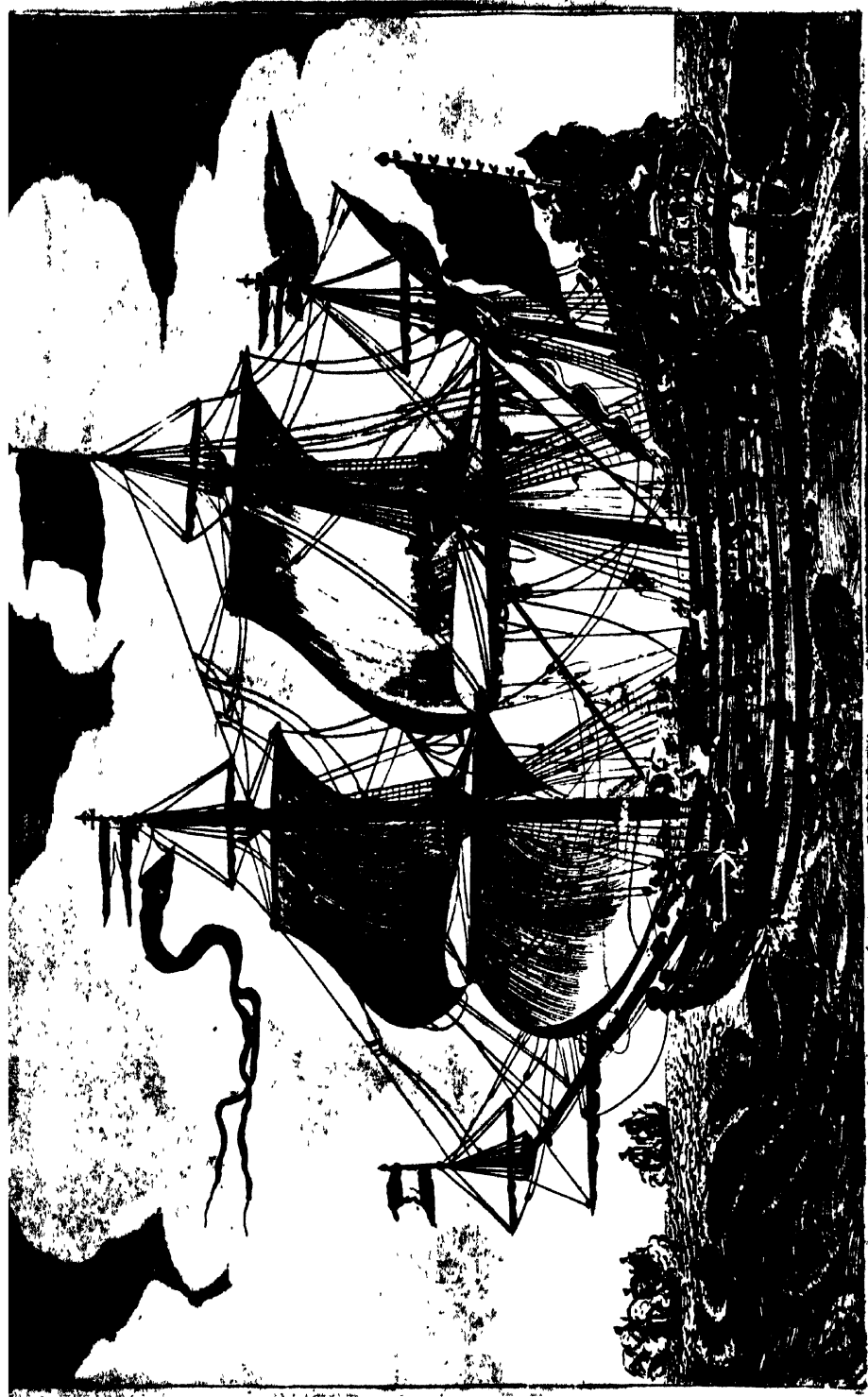
THE "GRIFFIN"

The ship represented in this print is supposed to have been one of those that took part in the Armada fight, but while her features do not conflict with that supposition, the name Griffin must be regarded as purely conjectural.



A TYPICAL DUTCH WARSHIP OF THE EARLY 17TH CENTURY
(FROM A CONTEMPORARY ENGRAVING BY CORNELIS DANCKERTZ)

(Macpherson Collection)



(Macpherson Collection)

THE "GOLDEN LION"

A somewhat fanciful picture which, though technically incorrect in several details, is interesting as contemporary.

a slip was constructed which might not be used for more than the single vessel. So it was that the *Great Harry* founded Woolwich Dockyard, for she was laid down in an open space near Erith where there was no vestige of an establishment. A large number of nobles and prelates contributed the material to her construction and as some of this material was very expensive, steps were taken to protect it. Then quarters and mess-rooms were erected for the shipwrights, who were then fed by the State, and so the dockyard grew up around the slip that had been only intended for the construction of one vessel.

As regards repairs the earliest way was to bring a ship to a suitable spot at the top of a spring tide, haul her as far as possible up the bank, and, when she had made a berth for herself, to build a dam round her stern as elaborately as might be convenient. The famous first dry dock which Henry VII built at Portsmouth cost, according to the accounts, £193 0s. 6½d., and was little more than a basin which was closed by two gates with the space between them filled in with clay and rubbish. Undocking a ship was a tedious business and on one occasion it is reported that it took twenty men twenty-nine days, working day and night whenever the tide suited, to clear the entrance and release the vessel.

Aids to Navigation.

When shipping did its utmost never to venture out of sight of land and to snug down and anchor at night wherever it was possible, light-houses and other aids to navigation were not necessary but when voyages began to be more ambitious it was another matter. In the early days there were several erected, the first ones being those maintained in Egypt some six or seven hundred years before Christ. Among the Wonders of the World was the Pharos of Alexandria, and if this really was six hundred feet high—as was reported in the old manuscripts—there was a good deal of reason for it. When the Romans commenced to build lighthouses Pharos was the generic name for them all, the ruins of one of them being still visible beside the Castle at Dover. After the thirteenth century there appears to have been a lull in light-house building until the early sixteenth when towers, mostly carrying huge open braziers of burning coal, began to spring up all over the coasts of Western Europe. In James I's reign it was proposed to erect a light on the Lizard, but the Trinity House immediately objected to it because it would help pirates to make their landfall and prey on British shipping. About the same time, however, Sir Edward Howard was granted a licence to build a lighthouse at Dungeness, his bargain being that he should receive a penny per ton from all ships passing the point. The claims of Trinity House in this matter led to protracted legislation, but the lighthouse was built.

The Buss.

Busses began to be mentioned in shipping histories in the early days of the sixteenth century and they appear to have existed almost

unchanged well into the nineteenth. They were used principally for fishing; in fact soon after their introduction they are mentioned in this connection only, and had a very full body on the water line with a narrow high poop. Generally speaking they were three-masted, the foremast and mainmast lowering for fishing purposes and the mizzen being used for riding. Some of them were certainly quite sizable and at the time of the Dutch Wars the herring busses on which Blake preyed ran from sixty to two hundred tons, although the average appears to have been round about eighty to a hundred.

The Dogger.

A fishing boat associated with the buss, but generally rather earlier, was the Dogger which was flourishing at the time of Edward III. What she was originally can only be surmised as a high sterned, full-lined boat with a tall mast and single sail amidships and a mizzen on the poop, but in later days she developed into something very much like the bomb ketches later used by the Navy. In the time of the Tudors and Charles I Doggers were frequently commissioned for naval purposes, but they do not appear to have been particularly successful and were dropped in favour of other small types, although they were often used later for privateering and smuggling as well as for fishing.

Elizabethan Improvements.

The long voyages undertaken by the Gentlemen Adventurers in Queen Elizabeth's day naturally led to great improvements in the construction of ships, and Sir Walter Raleigh described them as a practical seaman who had had more than a little to do with their conception. "In my own time the shape of our English ships has been greatly bettered. The striking of the topmasts has been devised, together with the chain pump. We have lately added the bonnet and drabler to the courses, we have devised studding-sails and sprit-sails. The weighing of the anchor by the capstan is also new. We have fallen into consideration of the length of cables and by it we can resist the malice of the greatest winds that blow: we have also raised our second decks." Many of these improvements still hold, while others have been improved out of existence. For instance, the old and certainly pre-Elizabethan custom of lacing bonnets, or extra pieces of canvas, to the foot of the sail when the weather was fine gave place to reefing, or taking in, canvas when it was foul. The studding-sails, which were set on the outer edges of square-sails, disappeared in the latter part of the nineteenth century when the competition of steam forced the owners to economise and cut down their crews. The unwieldy sprit-sails, which were set on a yard under the bowsprit and were later joined by sprit-topsails over it, gave way to headsails of the normal shape many years ago.

Feeding the Seamen.

The manner in which British seamen were fed, or rather starved,

has already been mentioned, and it is not surprising when one considers how often the victualling was put out by contract to speculators who were obviously unscrupulous. During the Commonwealth an attempt was made to feed the fleet officially, but it did not last long and soon afterwards the old contract system was restored. Pepys, who had an appreciation of the seaman's qualities beyond his age, did a good deal in the contract form which he drew out in 1677, but the system could not be satisfactory in any circumstances and in 1683 the State Victualling Department was again restored. It is very doubtful whether this was any more satisfactory than the old system, but in 1697 efforts were made to put things on a really satisfactory basis, particularly with regard to payments by the victualling office which were generally many months overdue. Although this effected a certain improvement—for one could scarcely blame victuallers for supplying bad food when they could not get paid—it was a long time before the matter was put anything like right.

The Discipline of the Stuart Ships.

In the general disorganisation of the fleet in the time of the early Stuarts discipline was hopelessly mixed, very harsh in one point and lax in another. For instance, although England was at war with Spain in 1625 it was reported that three big men-of-war were in the Downs with no officers on board and only a handful of men because everybody else was ashore celebrating Christmas. In such circumstances it was lucky that we were fighting the Spaniards and not the Dutch. At the same time the discipline was becoming very much more brutal and harsh than it had been in Elizabeth's time and in consequence the men had lost a good deal of their self-respect. Flogging was becoming so common that it was said "that some sailors do believe in good earnest that they shall never have a fair wind until the poor boys be duly whipped every Monday morning"—a superstition which still exists in many French fishing boats where a fair wind is sought by turning the ship's bows to the direction from which a breeze is desired and then flogging them.

The Early Yachts.

It is often said that yachts were introduced into the Navy and yachting into England when the Dutch presented Charles II with a pleasure craft on his Restoration. Ships had been sailed or rowed for pleasure from the very earliest times—the case of Edgar and the Seven Kings may be quoted as one in which the pleasure was all Edgar's—and in the Navy of the early Stuarts there were several small craft which were yachts in everything but the Dutch name. The support of Charles II and the matches which he arranged with the Duke of York undoubtedly did much to foster the sport, but they did not start it.

French Ships Copied.

As soon as the French started to build a Navy really seriously they

set about it on characteristically scientific lines, and when they sent their ships across to co-operate with those of King Charles their appearance caused a sensation. With all his faults the King had a great eye for a ship, and was so struck with the *Superbe* that he ordered Deane to design the *Harwich* as close to her dimensions and lines as he possibly could. She was so successful that nine others were laid down, and for the first time the English found that it was possible to build a really satisfactory ship which was not girdled, without a great element of luck. For generations after that both the French and the Spaniards had the reputation of building infinitely more satisfactory and faster ships than we could, and when we wanted a really good sailer we had to go out and capture her. When we had got her we generally altered her considerably to British ideas.

CHAPTER IX

The Early Explorers

Discovery and Trade.

Having traced the history of the military navy down to the end of what may conveniently be described as the third era of its history, it is necessary to turn back and follow up the twin tales of discovery and trade, for they are inseparably connected with the naval side and cannot be divorced from it. The three subjects go round in a score of intertwined threads and even to-day one cannot be considered without the other two, although the field of discovery seems to have been narrowed down almost to nothing.

The Dawn of Discovery.

The reputed discovery of Britain has already been mentioned in Chapter I as a necessary introduction to our sea-history, and the evidence that the Phœnicians actually did reach Britain has been summarised. Certainly the big authorities are not altogether agreed in this, for at least one believes that the Cassiterides, the islands from which the Phœnicians got their tin, were off the coast of Spain and were not to be identified with the Scillies at all. On the other hand, the remains of a very early boat, probably not long after the Phœnicians, were dug up at Glasgow and in that was found a cork plug which proved that even at that time the British Isles must have had communication, probably trading communication, with Spain or the South of France. In those days, however, the trade was almost entirely coastal, but from the likelihood of ships being blown out of their course it is quite possible that some remarkable voyages were made.

The Irish as Explorers.

The Irish appear to have carried out some valuable exploration work in very early days, both from religious and from very different motives. The earliest recorded expedition was in A.D. 222 when a big fleet under Cormac MacArt left Ireland on a three years' cruise that was pure piracy and included the ravaging of the greater part of the coast of England which caused a special force to be raised in the West. He also appears to have gone as far North as the Orkneys and to have aroused the first interest in the sea in the minds of his countrymen. Most of the long Irish voyages were religious, for the national character

has always produced anchorites, and they probably built their homes in the Faroes and certainly in Iceland. From Iceland it is only a short passage to Greenland and it is by no means impossible that the Irish claim to have discovered North America long before the Norsemen is true, although there is now no means of proving it.

Iceland.

The Irish priests who settled in Iceland had no desire to mix with other people or to encourage visitors, so that their doings there are not recorded. It was somewhere about the beginning of the ninth century that Naddod was proceeding home from Norway to the Faroes when he was overtaken by a gale and, as was the usual practice of seamen in those days, ran before it. On the tenth day he sighted an active volcano which, on top of their miseries, naturally terrified his men. However, they determined to explore and came upon a good landing place where, although there were no signs of human habitation, there were, in the words of the old Saga, "woods without end and fair pastures dripping butter." They saw that it was good and remained there for the whole summer, leaving on the approach of winter and christening it Snowland. The story attracted other adventurers and Goddar Svarvarson sailed round the island and called it Goddarsholm, settling there for the winter. Many others followed and eventually brought home stories of white-robed priests and choristers they had found singing on the shore and had wantonly slain. These were probably early Irish settlers. Eventually a large colony was made, although it is not likely to have been composed of the best of Norway. Probably outlaws and ne'er-do-wells formed a considerable proportion of the population, but it was certainly courageous and enterprising.

Erik the Red.

One of the most noteworthy of these settlers in Iceland was Erik the Red, who appears to have been a mighty warrior of ungovernable temper. Being refused repayment of a debt he slew the debtor and for this was outlawed. Therefore he vowed that he would find the fabled islands of the West, and gathering a party he coasted round Iceland and then struck out into the open sea. In due course he came to a land of snow and ice, as unpromising a home as one could imagine, but he determined to call it Greenland for, as he naively remarked, "Men will be the more easily persuaded to come here if I give it a fair name." In spite of what he knew he told such a wonderful story of promise when he got back to Iceland that twenty-five shiploads of men and women followed him. Some were sunk and some put back, but finally fourteen ships struggled to port and Greenland was colonised.

Earliest Polar Exploration.

The earliest recorded Arctic explorer was Other, a Northman from Helgeland, near the modern Trondhjem, who sailed in the middle of the ninth century and who deserves to have Alfred the Great as his

historian. He was the first to round the North Cape and brought back the story of the Midnight Sun, which must have been a terrifying spectacle to anybody as superstitious as the Viking. His feat stirred the imagination of the Saxon king, whose Norse blood is shown in nothing so much as in his eagerness for every record of travel and discovery and his willingness to translate them himself for the benefit of his people. It was an excellent way of developing the "Sea-Sense" which he wanted badly for his Navy.

Expeditions from the Orkneys.

The Norse inhabitants of the Orkney Islands early became famous as seamen, as was only natural from their blood. In 1150, according to the saga, Earl Rognvald took a big expedition from the Orkneys to the Mediterranean and Palestine in company with some Norwegian galleys. The fleet consisted of fifteen vessels in all, with which they skirted down the English, French, and Spanish coasts. They appear to have been very late in starting and it is small wonder that they were in danger of losing ships. In the Western Mediterranean six of the fleet had already had enough and parted company to make for Marseilles. The pilgrims appear to have mixed a desire to profit with their religious motives, and meeting a Moorish ship off Sardinia they contrived to capture her with very considerable booty and a number of slaves who proved profitable. They wintered in Constantinople and Rognvald appears to have returned home overland next year.

Nicholas of Lynn.

There are vague and rather unconvincing references to an Arctic voyage about 1360 carried out by a Carmelite monk named Nicholas of Lynn. He certainly existed and was a scholar of considerable repute, but whether he actually did voyage into the Arctic in an attempt to reach the North Pole is a different matter.

The Basques.

Although they suffer from having no historian, the exploratory work of the Basques must be mentioned. In their search for fish and whales they certainly worked to the West of Iceland and realised the harvest of the Grand Banks as early as the middle of the fourteenth century, very possibly before that.

Madeira and the Canaries.

It is difficult to say just when the Canaries, or the Fortunate Isles, and Madeira were first discovered. It is obvious that the Ancients knew of the Canaries, although perhaps somewhat mistily, and it is more than likely that the Phoenicians had visited them. The Romans mentioned them definitely, but after that they drifted into legend. In 1270 Lanciloto Malocello with a Genoese expedition rediscovered the islands and built a castle in the most northerly, which is still known after his name. Madeira also is supposed to have been known to the Phoenicians and to the Romans, but its later discovery is generally put

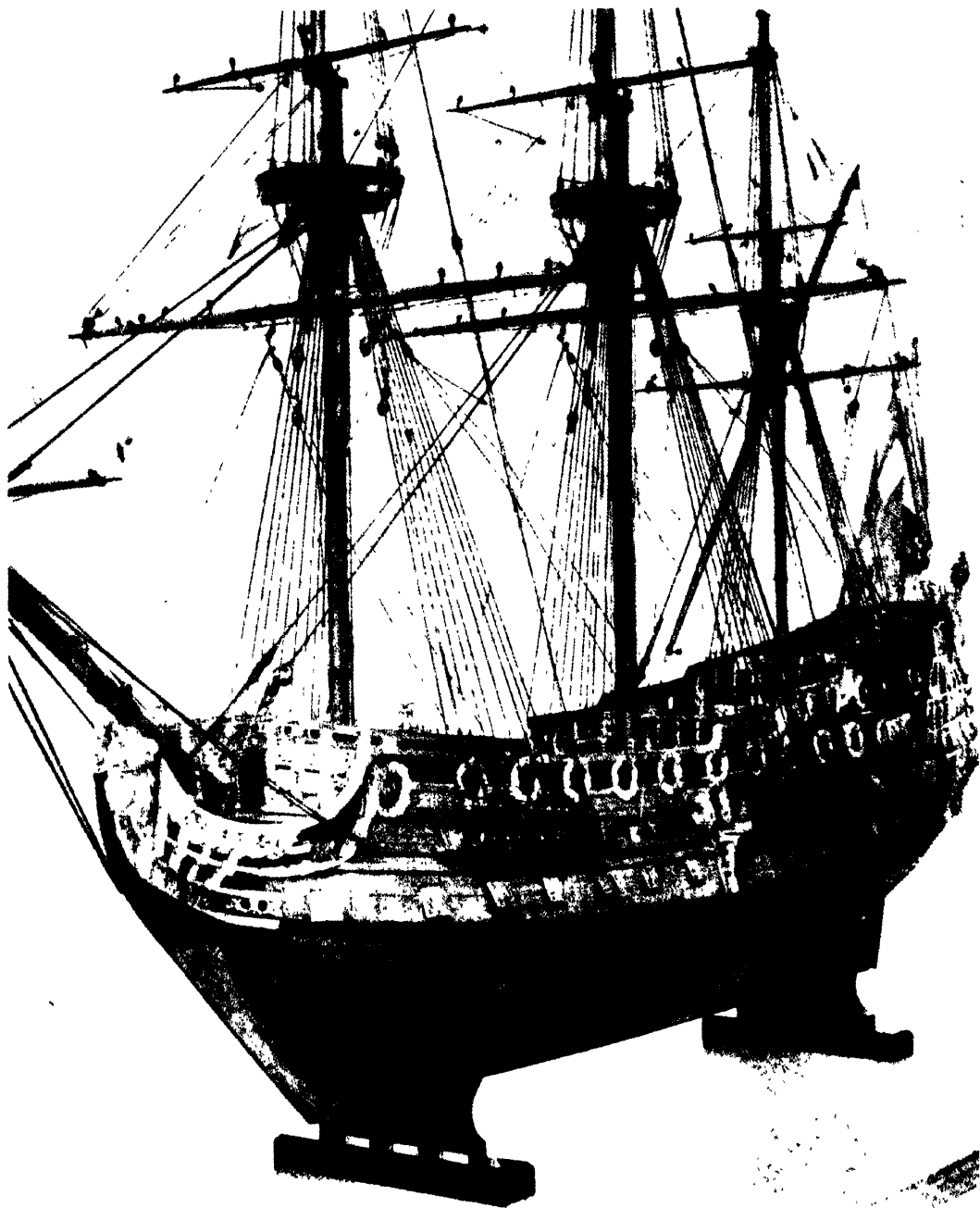
down to Robert Macham, a West Country gentleman who eloped with his neighbour's wife, hired a ship at Bristol and attempted to reach France. Bad weather swept them out into the Atlantic but on the fourteenth day the wind moderated and they found themselves within sight of the Island of Madeira. They landed there, but owing to their hardships the lovers died shortly afterwards and the seamen, attempting to reach home, were captured by the Moors and imprisoned as slaves. They spoke of their discoveries and, one of their companions being ransomed, took the story to Prince Henry of Portugal who fitted out an expedition for the discovery and seizure of the island. Meanwhile Henry III of Castile had also fitted out an expedition and had reached the Canaries. There is a good deal of doubt thrown on the story, but it has been believed for centuries.

Marco Polo.

Marco Polo, the Venetian traveller, was undoubtedly the greatest explorer of his time and although his voyages were by land rather than by sea he aroused an interest in geography and opened up vistas that caused many maritime expeditions to set out. His father and uncle belonged to a noble Venetian family which did not disdain to engage in trade, and it was in the course of their business that they found their way to the Court of the Kublai Khan at Pekin. They returned to persuade the Pope to send out missionaries to convert the Chinese to Christianity, but unfortunately he only sent two instead of the hundred desired, and these two turned back. The merchants went out again, however, and took with them young Marco, passing through the countries that after their time were closed to Europeans until the middle of the nineteenth century. Marco Polo was then about twenty-one and was very kindly received both then and on subsequent occasions, for he discovered that the Khan was enthusiastic to hear everything about foreign countries and took very good care that his wishes should be satisfied. Marco took out notebooks packed with all the information that he could collect, much of which incidentally has come down to us. It was as an escort for a noble Mongolian lady that the Polos returned as far as Persia, this voyage being made by sea from Amoy. There were long delays on the Sumatra coast and in India and it was two years before they reached their destination, during which Polo had made the most of his time. At the Battle of Curzola in 1298 he commanded one of Dandola's galleys and the result was that he spent many months as a captive in Genoa, a very fortunate circumstance for posterity for it was while he was in prison that he dictated his famous book. In 1324 or 1325, in his seventieth year, he died at Venice. His book is difficult to read and rambles all over his many interests, but he gave Europe a mass of information and certainly had a very considerable influence on the history of the sea.

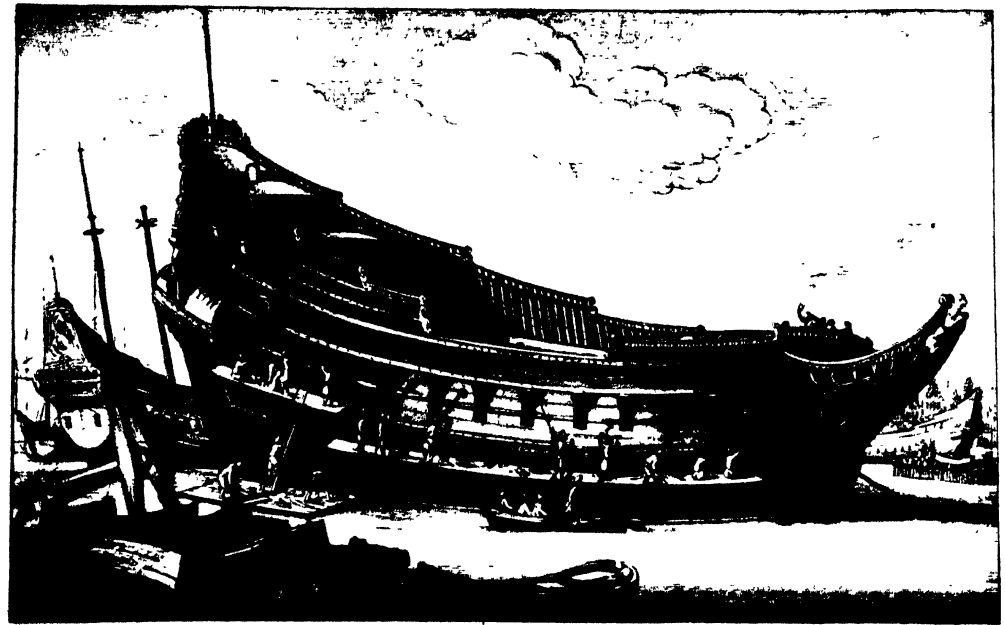
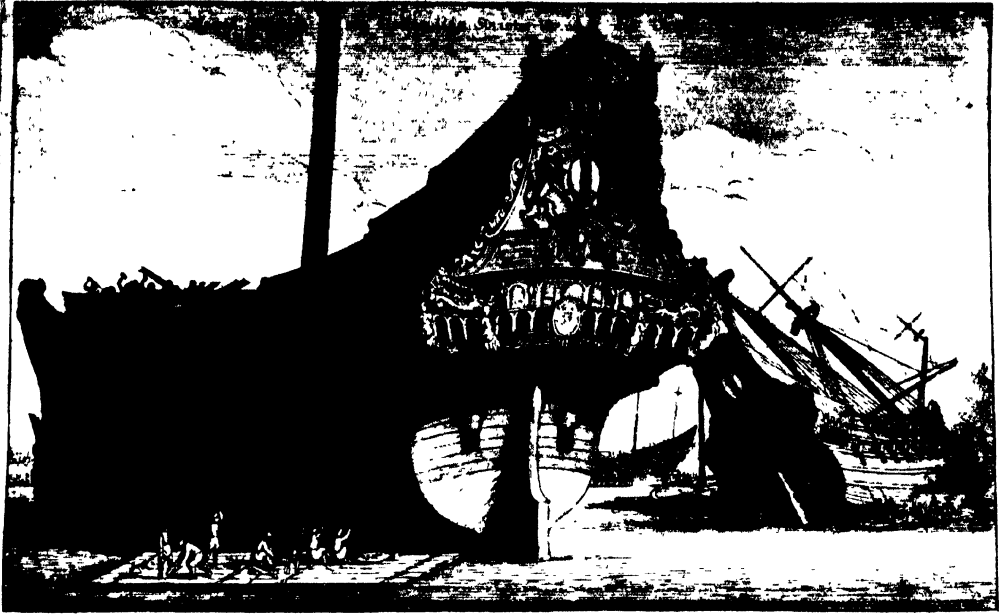
Sir John Mandeville.

After Marco Polo the next great figure in the history of exploration



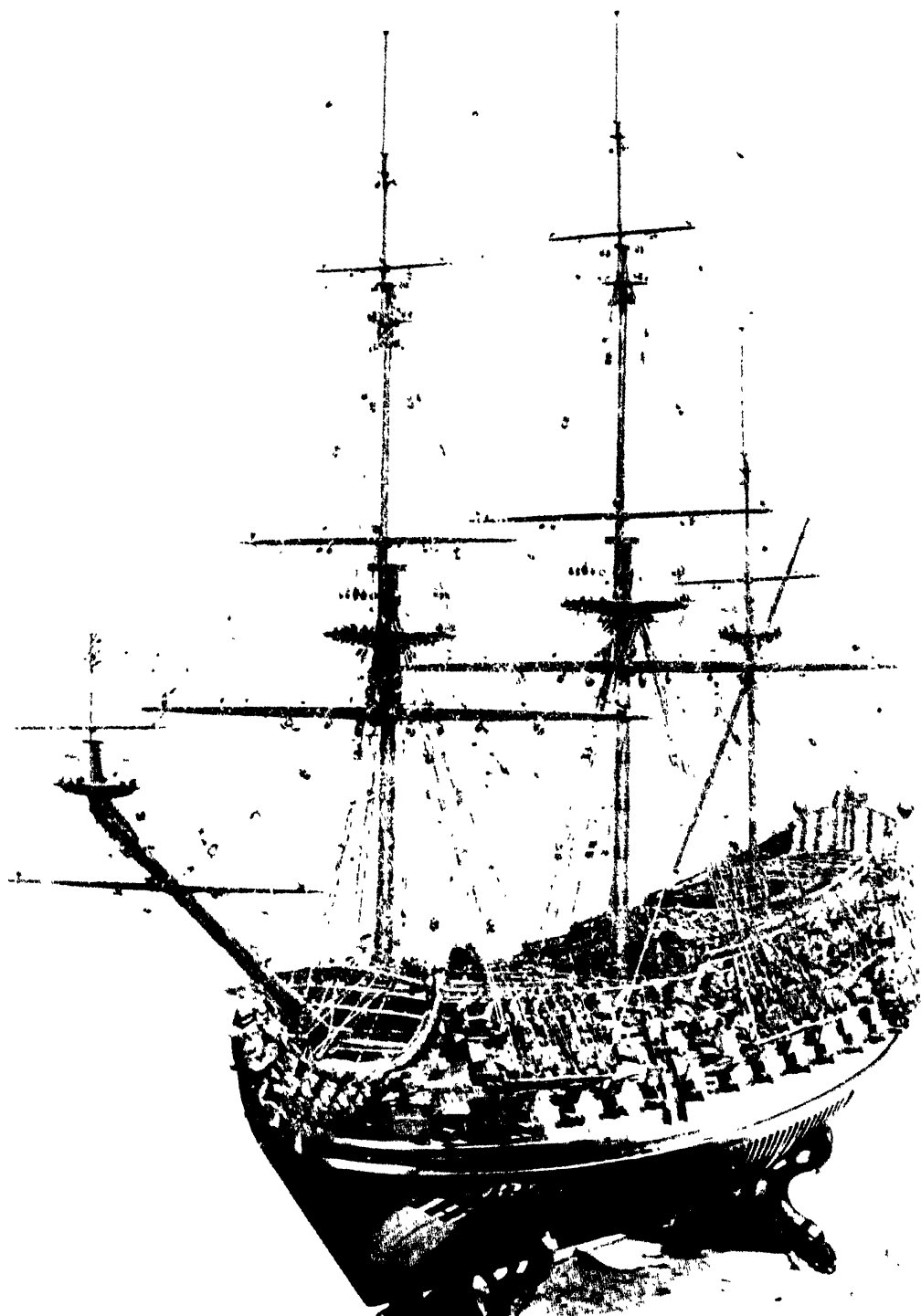
MODEL OF H.M.S. "PRINCE"

*The Prince was built at Chatham in 1670 from the designs of
Phineas Pett, based on the ideas of his father.
(Science Museum, South Kensington)*



SHIPS UNDER REPAIR
(FROM ETCHINGS BY HOLLAR IN THE PRINT DEPARTMENT, BRITISH MUSEUM)

These two etchings by Hollar, who knew ships tolerably thoroughly, give a good idea of the seventeenth-century Dutch ship without her rigging or ballast. The decoration and quarter galleries are especially worthy of notice.



MODEL OF THE 90-GUN SHIP "CORONATION"

The Coronation was built in 1686 and lost in the great gale of 1703. She was a typical second-rate of the period. The model was until a few months ago in the London Museum, but has now come to America.

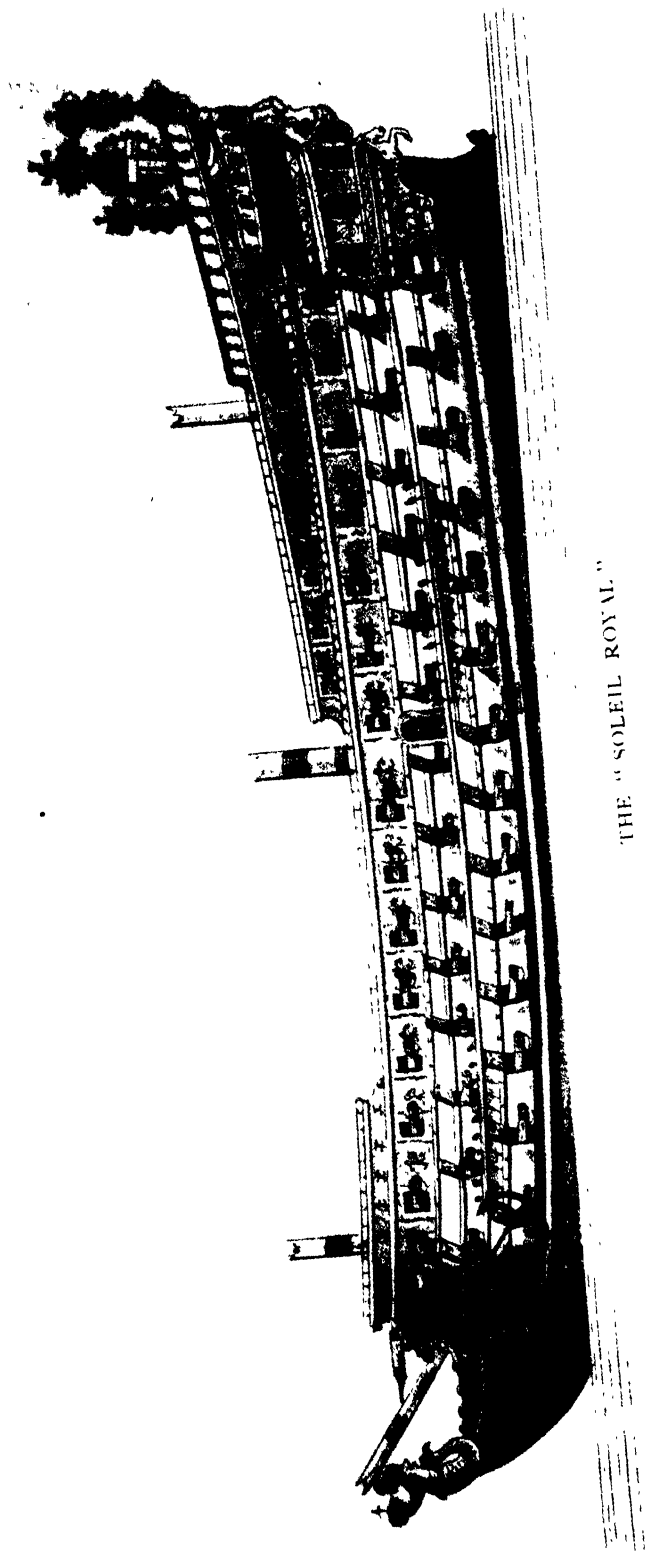


THE "SPEAKER"



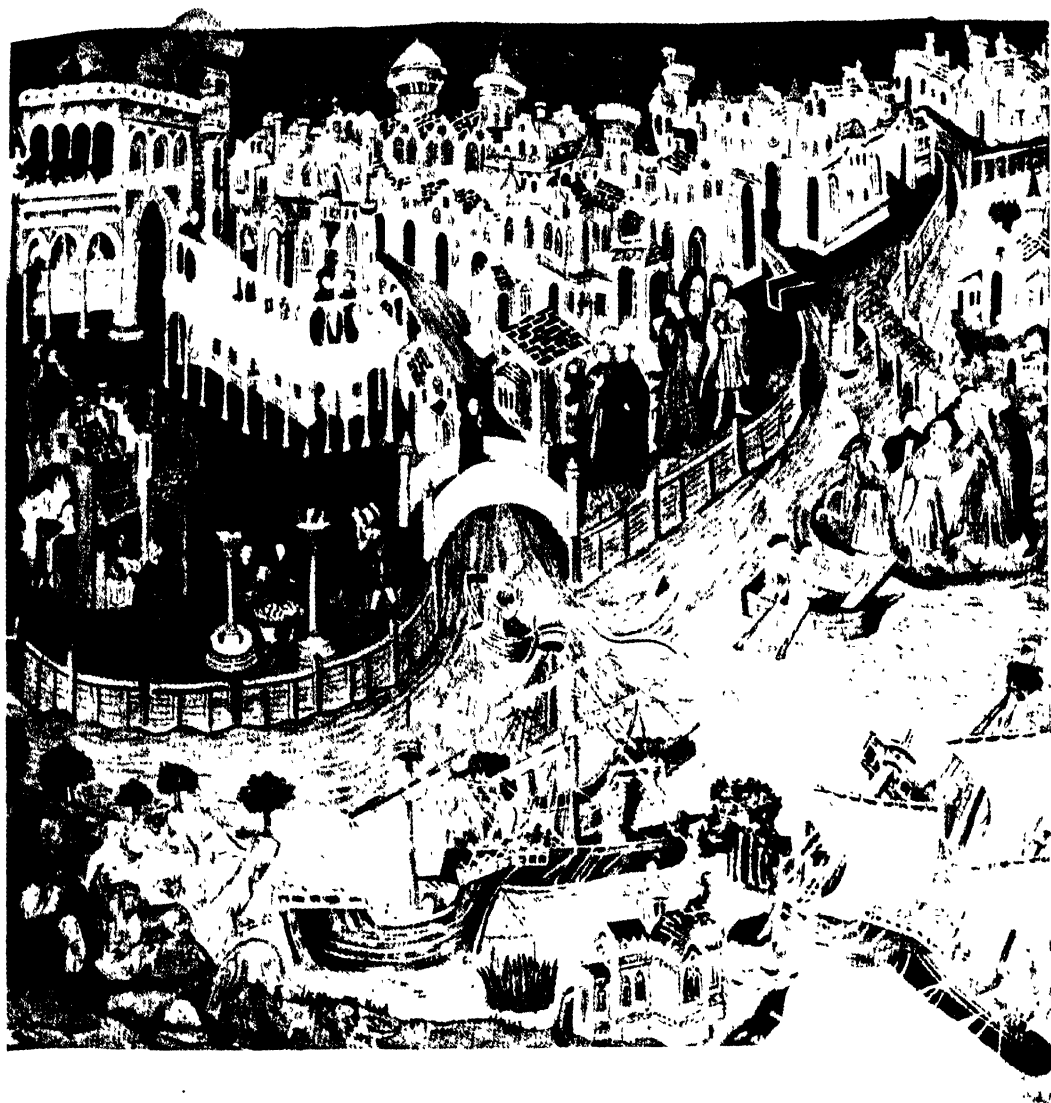
THE "ROYAL CHARLES"

The Speaker (above) was a 54-gun ship, built for Cromwell in 1649 and lost on the Goodwins in the great gale of 1703. The Royal Charles (below) was a 100-gun ship of 1,528 tons,



THE "SOLEIL ROYAL"

Charnock's illustration of the crack ship of Louis XIV's navy shows well the grace of her lines and elaborate decoration in French ships of the period.



THE EMBARKATION OF MARCO POLO, VENICE, 1338.
 FRONTISPICE TO A MANUSCRIPT NARRATIVE OF HIS TRAVELS IN THE BODLEIAN
 LIBRARY, OXFORD. (MS. Bodl. Misc. 264)
 (From Green's "Short History of the English People," illust. ed.,
 by courtesy of Messrs Macmillan & Co., Ltd.)



EXPEDITION AGAINST THE ISLAND OF CHIPANGU OR SYPANGU (JAPAN)



THE SOLDIERS OF THE GREAT KHAN UNABLE TO LAND IN JAVA

These two pictures from an old MS in the Bibliothèque Nationale, Paris (Manuscrit Français, No 2810, fol 72 and 73 v^o) represent incidents in the travels of Marco Polo, and show the curious idea of some of the early artists of what a ship of their own time looked like.

is Sir John Mandeville, who may not have been a great explorer but who was certainly a phenomenal liar. His experiences were published in the middle of the fourteenth century. According to his book he was an English knight who sailed on Michaelmas Day, 1322, and performed a wonderful voyage all round the then known globe. Genealogists have contradicted most of the statements that he makes concerning his own birth, and it is generally believed that the book was written by a Liège physician of somewhat speckled reputation. All the experiences that he gives as his own have been taken from some authority or other, but as some of these authorities have been lost there is a certain amount of value in them when one can get away from the gross exaggeration and ornamentation which he adds to every story that he tells. One thing must be said in his favour and that is that even at that age he had a perfectly correct idea of the shape of the earth and knew the principle of finding latitude by observation of the Pole Star. Incidentally he tells a story which he said that he heard in his youth, of how a certain man travelled eastward until he returned to his own country. This particular story has found no corroboration as to date, but it is distinctly interesting.

The End of the Era.

The fourteenth century really ends the era of more or less casual discovery, when men went to sea and were generally blown at the mercy of the winds until they increased the knowledge of the world more or less unwillingly. After that there was a period when the dissensions of Europe prevented any good work being done, and when that was ended the great period of exploration set in, a period when men had some clear idea of what they sought and sailed with a definite object. Sometimes their discoveries were very different from their dreams but that made no difference to the root principles of the age.

CHAPTER X

The Beginning of Trade

The Phœnicians.

It is generally believed that the Phœnicians originated on the shores of the Persian Gulf and there seems to be little enough to make one doubt the theory, although few would venture on a definite date. They had migrated to the Mediterranean and founded the City of Tyre before the year 1200 B.C. for a certainty, and possibly far earlier. The Indian coasts were probably navigated for some thousands of years before that, but they are outside the ken of this work for many centuries to come. The Phœnicians lived for their gold purely and simply, and they had no desire for territory beyond what was necessary for their trading cities, their defence, and to some extent their feeding. They built ships which were seaworthy, and they must have been possessed of extraordinary courage to have ventured so far into the unknown. The date of their first visit to Britain is unknown, and there are some who disbelieve that they ever reached us although the evidence appears to be tolerably conclusive. Presuming that they did, it must have been very early indeed, and they also visited and established trading posts in various other parts of the then known globe, always taking very good care that no whisper of their discoveries should reach the ears of possible trade rivals. They built ships for their own use and for sale to anybody who would buy. They chartered ships fully manned to any warring king who was willing to pay their price: the cause mattered little or nothing to them. There is little doubt that they were hard bargainers, scrupulous only when it suited their purpose, and often enough very unpleasant people to meet. But they were willing to work and run every risk for their profits, and with this aim they made rapid progress.

Roman Trade from Britain.

There was apparently a very considerable trade from Britain during the Roman occupation. Ireland is noted as having a regular commerce as early as A.D. 81 and London is specially mentioned by Tacitus as having a very considerable sea-borne trade. In those days it was apparently in oysters, dogs, slaves, tin and lead, while Southampton and Richborough also had a big trade. On the Gallic side Boulogne was the principal port, and the mouths of the various rivers. Towards the end

of the Roman occupation there were said to be eight hundred ships engaged regularly in the corn trade between Britain and Gaul.

The Crusades.

The Crusades appertain to land rather than sea warfare but it is necessary to mention them here on account of the strong influence they had on British shipping in the twelfth and thirteenth centuries. The general routine was to go overland to Marseilles and there embark, generally in galleys supplied by the Venetian or other Mediterranean powers, but a considerable number of ships certainly went across the Bay of Biscay and through the Straits of Gibraltar, which must have meant a considerable test for their seaworthiness. Those who took the overland route must have observed not only the Mediterranean ships but also their methods of trading, and although the average Crusader would not be very interested in this, the host of camp-followers who followed the army most certainly would have been.

Richard's Crusade.

When Richard I went on his famous crusade the greater part of the army was transported by sea all the way from England but the most appalling waste was obvious everywhere. For instance ships were loaded with wine for the crusaders in Dover, although this wine had previously to be imported from France and French ports were touched at on the way out. The fleet going round in the Atlantic had a very bad time and a number of ships were lost. Impatient of delay Richard wasted more money in hiring ships in Marseilles and eventually he re-equipped his whole force in Sicily, where he wintered. The progress of the fleet to the Holy Land was harassed by weather and by the action of the Turks. That such a voyage as this should be undertaken by a big fleet, even if the greater part of it was scattered on the way, and that the ships should be stored for a year's service, are interesting notes of this early period.

The records left of the transport fleet give us a very fair idea of the types of ship at sea at that time. Most of the work was done in galleys, some of them 120 feet long, propelled with one bank of oars and carrying a hundred men apiece, but there were all sorts of other ships employed. The biggest of the transports were the Dromonds, afterwards to have an evil reputation from their piratical operations in the Channel, and one of these that was sunk in 1182 had no fewer than 1,500 passengers on board. The busses and the salandres were smaller, while the Huissiers carried the horses which were accommodated in large open castles on the poop. From Marseilles to Acre took fifteen to twenty days at the very best but Richard I took no less than six months to get from England to Messina. As indicating something of the size of these ships it is mentioned in the inventory of one of his transports that she had thirteen anchors, thirty oars and two sails and that she carried forty horsemen and their mounts, fourteen footmen and fifteen sailors, but she must have been very much on the small side

compared with some of the big dromonds.

Plunder by Land and Sea.

From a very early age the wine fleet sailed together for mutual protection and in the fourteenth century they were provided with a suitable armed escort, generally supplied jointly by the Cinque Ports and the town of Bayonne. In the year 1372 Edward III fixed the reward of this convoy at two shillings for every tun of wine landed safely in England but ordered that all the profits of their own trading and any prizes that they might take in the course of the voyage should be deducted from this. There appears to have been considerable dispute over the accounts. The routine was for the wine fleets to leave England in the autumn, return before Christmas, and then to go down again before Easter. Occasionally summer convoys were formed. Pirates at sea, however, were not the only bandits that the wine trade had to fear. It has already been recorded how the Germans were legally looted off Queenhythe and in 1505 it became the custom for every wine ship that passed the Tower to give the lieutenant there two black leather bottles, or lombards as they were called, from her cargo. Most of the wine was unloaded at Billingsgate but a few ships came through the drawbridge of London Bridge bringing foreign wines to Queenhythe and also to Vintners' Wharf and Three Cranes Wharf whose position can still be traced.

Merchantmen-at-Arms.

As has already been shown in the history of the early military operations of the Royal Navy, the King's Fleet was generally composed more of armed merchant ships than of regular men-of-war and this requisitioning of merchantmen was always a sore point with the shipping industry. The King had the right from the earliest times, and in the Norman period it was definitely laid down that he could issue writs to arrest the ships of private owners all round the coast and at the same time could impress the necessary number of seamen, although this was only regularising ancient practice. The King also could and did arrest friendly foreign ships in British ports. The agreement with the Cinque Ports was beside this right and definitely gave the King the services of fifty-seven ships for fifteen days without payment, each with twenty soldiers. The conversion for many years was quite simple and only consisted of fitting temporary and rather shaky castles forward and aft and a fighting top on the mast-head which had to be strong enough to support not only its crew but also a heavy weight of stones and missiles that would be flung down on the enemy's deck. This was by far the cheapest way of organising a fleet, but it can be well understood that it injured trade very seriously and in the Middle Ages Parliament was constantly complaining that ships were taken up by the King long before it was necessary and often their owners had to pay their keep for months in port before the regular charter started. All this time the crews had to be paid and fed by the luckless shipowners.

Letters of Marque.

Quite apart from the armed merchantmen who were regularly commissioned into the Royal Navy for a longer or shorter period, were the merchantmen who sailed under Letters of Marque to attack enemy commerce and frequently even their men-of-war. The practice started some time in the thirteenth century—1243 is the date often mentioned—and originally permitted an individual Englishman who had proved that he had suffered loss at the hands of a foreigner to recompense himself from that foreigner's goods. Needless to say the party against whom the letters were made out took every care to keep out of the way of his revenge, and accordingly it became the custom to grant letters, first of all against a port and then against a country, limiting the value to be taken to the amount of the first loss. No machinery was set up to check these amounts, nor indeed was it possible, so that privateers naturally allowed themselves a very good rate of interest in spite of all precautions. Afterwards the system was extended to the granting of letters against the King's enemies in general for the period of hostilities, but very often they were used when the country was supposed to be at peace. The later developments of the system will be recorded in their place.

Impressment of Foreign Ships.

The King's right to impress foreign ships in British waters was early and continuously exercised, partly because everything that floated was usually required and partly because it was generally safer to refuse payment to a man who was hundreds of miles away than to a loyal subject on the spot. Often, also, it was from motives of policy and this policy was not always scrupulous. Later on, especially in the Wars of the Roses, foreign ships were often taken up because the loyalty of our own men was more than doubtful, but it was not until the Tudors came that the wisdom of satisfying foreign merchants with regard to their pay was fully realised.

Chartering.

Besides the hiring of ships for service as men-of-war there was quite a lot of regular chartering as early as the thirteenth century. In 1290 a ship with a crew of six men to carry a mixed cargo of wine, cyder, wheat and oats from the Thames to Berwick was hired for ninety-nine shillings for the trip, and three years later we appear to have had quite an established carrying trade, for merchants of Spain and Portugal were taking up British ships to transport their goods to Flanders. Henry V in 1423 hired his ship the *Holigost* to some Lombard merchants for a journey to Zeeland and back for twenty pounds, which has been worked out on modern values as a rate of about eight shillings a ton for a two months' voyage.

Warships in Trade.

While the early fighting fleets were composed principally of armed merchant ships there were occasions on which the procedure was

reversed and men-of-war were employed in trade. The custom began in the time of Henry III—before which Royal ships were not large enough to attract the traders—and continued down to the reign of Elizabeth. As a rule the King chartered his ships for a lower price than private owners could manage, considering that he obtained a big advantage in keeping them maintained and manned.

The Perils of the Sea.

One would have thought that the faulty construction of their ships would have given the early travellers quite enough cause for fear, but they had to add superstition and all sorts of terrors until one cannot but admire the religious fervour of the pilgrims that persuaded them to undertake their voyages at all. Writing in 1350 one Ludolph of Cucham gives a most terrifying catalogue, and among the monsters he mentions there is the sea swine which apparently rises up near a ship and begs. "If the sailors give it bread it departs; but if it will not depart then it may be terrified and put to flight by the sight of a man's angry and terrible face. He must look at it boldly and severely and must not let it see that he is afraid, otherwise it will not depart but will bite and tear the ship."

The Navigation Act, 1382.

The British Navigation Act is generally associated with the time of the Commonwealth and the Wars with Holland, but the first one was passed as early as 1382 when Richard II enacted that British subjects should export and import goods in English ships only, with the majority of the crews English subjects. This was to foster the Navy, which at that time had dropped to a very low ebb, but it was practically nullified by an amendment in the following year which defeated its object. In 1464 a second Act was passed, but after three years' feeble enforcement this was allowed to lapse.

The Development of the Slave Trade.

The manner in which the slave trade was started by Hawkyns has already been told and for a long time the trade was confined to the Spanish colonies. The British plantations such as they were did not call for any slave labour and it was not until Barbados and Antigua were founded round about 1625 that the British slave trade sprang up. For some time it was more or less casual, but in the reign of Charles II the charter of the Company of Royal Adventurers from England to Africa was taken over by the Royal African Assiento Company, who set about making the supply of negro labour to the Spanish West Indies and to the British colonies a regular business. Their head depôt was at Kingston, Jamaica, where a huge building was put up as a central mart. It was later that Bristol and Liverpool made the carriage of slaves one of their principal trades and entered into a bitter rivalry. Slaves and fruits were somewhat callously regarded as perishable cargo, which was the reason that the West Indiamen were built for speed whereas the East

Indiamen lumbered along in their own quiet fashion and made terribly long passages.

The Trend of Trade.

With the beginning of the Tudor period trade tended to divide into three parts, the home and Continental trade which steadily developed in its own way without any very drastic mile posts and the overseas trade to the West and to the East. These soon monopolised the interest of the historian and are dealt with in the following chapters which show how trade and discovery went hand in hand until the greater part of the modern world was thrown open in a remarkably short space of time. So striking were the instances of this opening that one is inclined to overlook the less picturesque features of commerce but they steadily developed on a sound basis, feeding and being fed by the progress of discovery.

CHAPTER XI

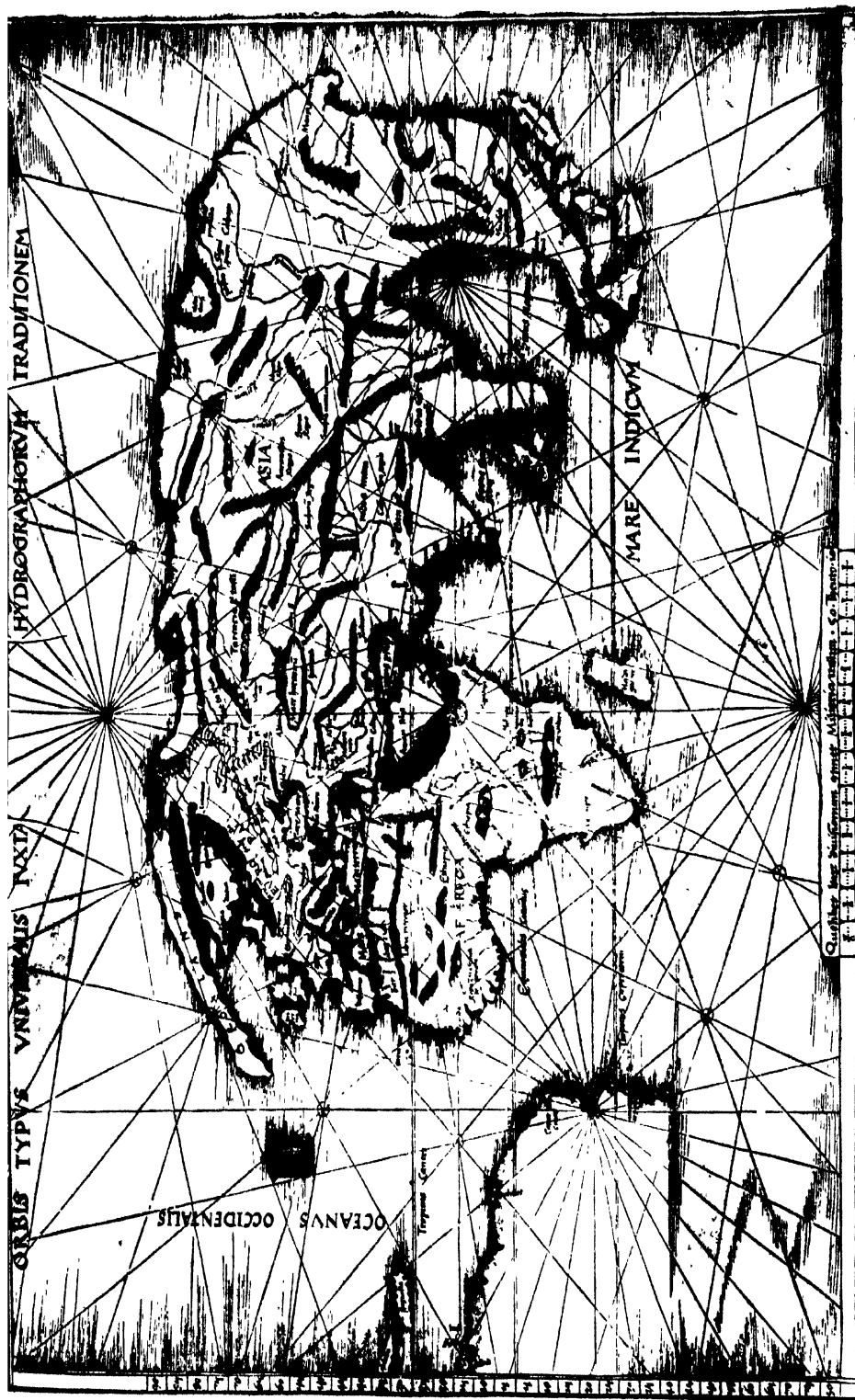
The Opening of the East

The Road to the East.

The existence of Cathay and the great nations of the East had been known to Europe from the earliest days, although then more or less mythically. The Crusades led to more being learned, for the Overland Route to China was then in full operation and many Oriental merchants were operating in the Near East. In those days, however, Western Europe had little thought for trade, and those who had a mind which saw further than agriculture and war had plenty to keep them busy near at hand. When ships improved and the nearby markets became fully covered, men's minds turned further afield and the stories brought home by Marco Polo and others revealed in the Far East a wonderful field of trade and profit. The Overland Route was long, expensive and dangerous and did not welcome interlopers, so that it is little wonder that efforts were made to find a sea road.

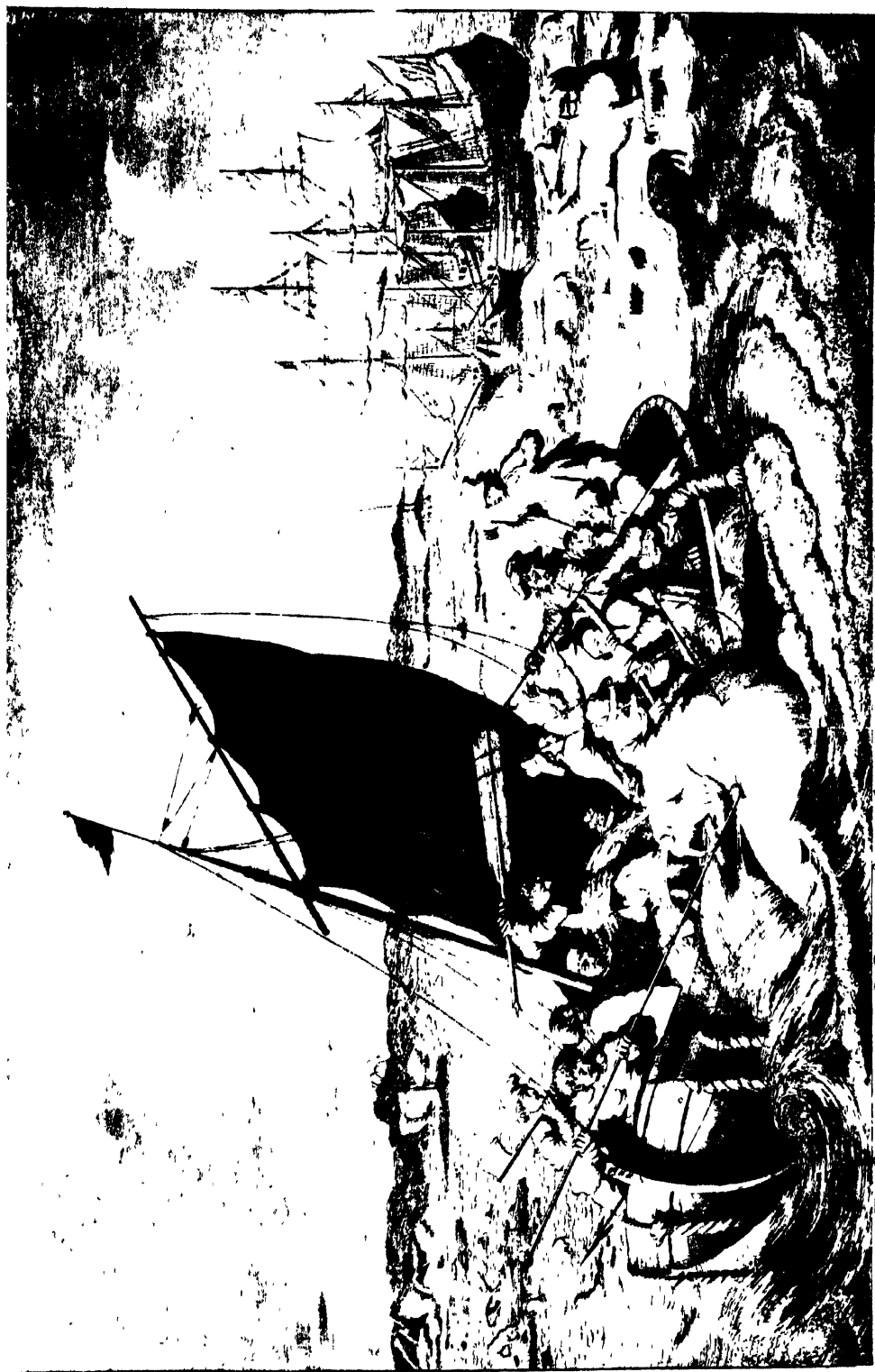
Prince Henry the Navigator.

A considerable part of the credit for the strides that were made in exploration work during the fifteenth century must go to Prince Henry the Navigator, of Portugal, the grandson of John of Gaunt and son of the King John I who freed his country. After distinguishing himself as a soldier he carried out some exploratory work himself down the West coast of Africa, which he was convinced would lead to India. After that he sent out numerous expeditions which greatly increased the world's knowledge of the African coast, and at the same time he colonised the Madeiras and Azores. At this time he appears to have vaguely considered the possibility of a Western route to the East. In spite of discouragement and ridicule he still worked on his schemes until in 1441 his men were able to round Cape Blanco and bring him slaves and gold dust from Guinea. Immediately public opinion changed and everybody was with him, numerous expeditions being sent out manned both by Portuguese and foreigners. The prince died in 1460, beloved by everybody, but the work that he did lasted infinitely longer, for it was entirely due to his encouragement to their predecessors that the work of Vasco da Gama and other explorers was possible. They have aptly been described as Prince Henry's executors.



PTOLEMY'S MAP OF THE WORLD

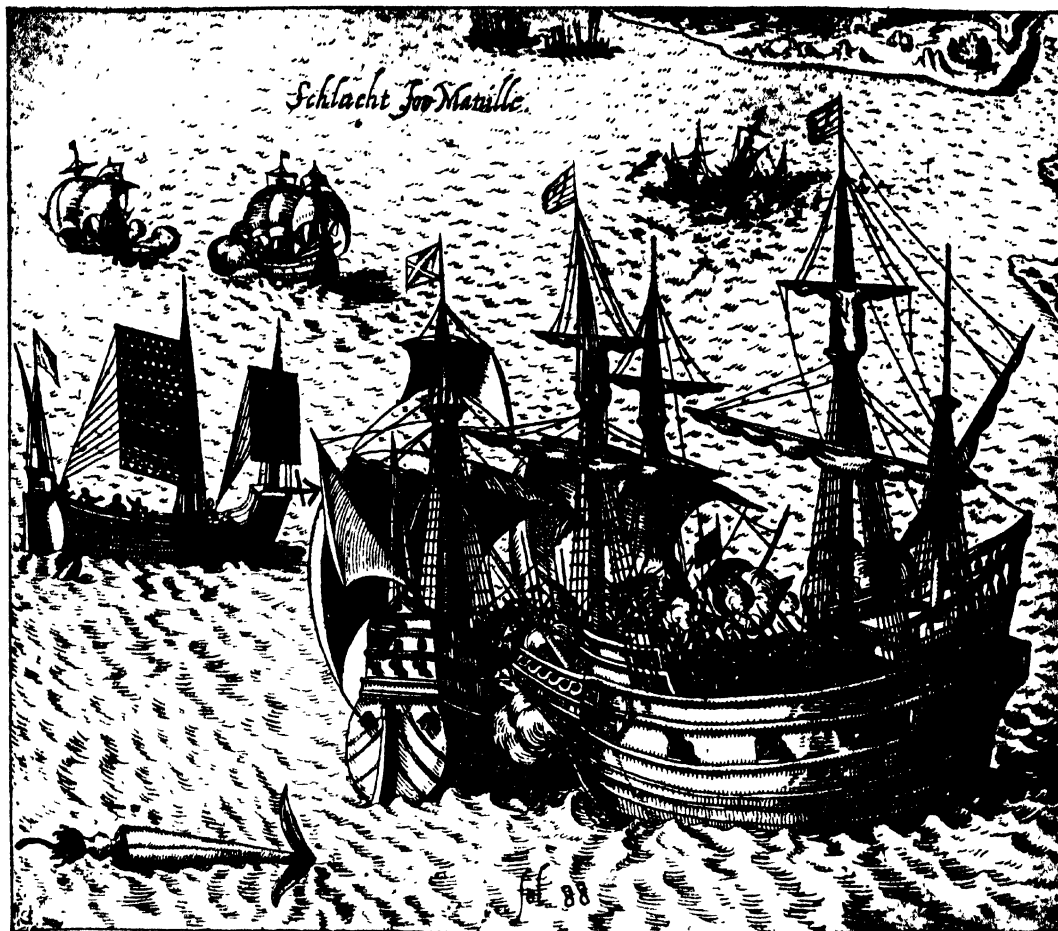
Published in 1513. The limited knowledge of the early navigators is shown by this map, which explains many of their



Jacht naar Nova Zemla in den Jaere M D V C V I

BARENTZ IN THE ARCTIC, 1596

(Macpherson Collection)



(Macpherson Collection)

ACTION BETWEEN DUTCH AND SPANISH SHIPS OFF MANILA, ABOUT 1595

The Dutch and the Spanish were always at loggerheads in the East, and the action portrayed is only one of many that were fought whenever the opportunity offered. The mat sails of the native boats are interesting.



ANGLO-DUTCH VICTORY AT VIGO, OCTOBER 12, 1702

Rooke was the luckiest of Admirals, and every time he made a mistake in one direction it seemed that Fate recompensed him in another. The attack on Cadiz having proved a lamentable failure, he destroyed the Spanish Treasure Fleet on the way home and, of course, was forgiven.
(From a print lent by Messrs T. H. Parker)

Vasco da Gama and his Followers.

Like many other explorers of his time the origin and early days of Vasco da Gama were the subject of infinite rumour, more or less unreliable. Perhaps the reason of this is that in those days it was far easier for a man of obscure birth but great courage to make a name for himself at sea than on land. He is supposed to have been born about the year 1460 and when he was famous he was attributed with a wonderfully noble family. It is known for certain that he was the third son of the Governor of Sines, one of the many explorers sent out by Prince Henry the Navigator. Bartholomew Diaz had proved that there was a sea way round the Southern extremity of the African coast and immediately he returned in 1488 it was proposed to follow up his discoveries. This scheme fell through, however, and it was not until 1497 that Da Gama was put in charge of an expedition of four vessels specially designed and built for the work, which sailed from the Tagus. They reached Malindi in East Africa and there found a number of Hindu merchants from whom they obtained a pilot. Da Gama struck across the Indian Ocean to Calicut on the Malabar coast, where he had to meet the jealous opposition of the traders who were already established there. However, he returned to Portugal with golden stories of his discoveries, and a fleet of no less than thirteen ships was immediately sent out under Pedro Alvares Cabral, who by bad navigation discovered Brazil on his way out to Calicut. The traders who were left at the post by Cabral were murdered by the natives and Da Gama was put in command of the expedition of ten ships that was sent out in 1502 to avenge the insult. This was done with appalling savagery, and from thence he proceeded to Cochin, getting favourable trade treaties all the way out by the terror of his name. Numerous expeditions were sent out to trade in the East, but some of them were so badly bungled that Da Gama was glad to emerge from his retirement to take over their control as Viceroy of India. He established himself at Goa and immediately set about repairing the damage done by the errors of his successors, but he was not destined to go very far with them and died at Cochin on Christmas Eve, 1524. He was certainly one of the greatest men in the history of Portugal and of the sea, and it was after his death and that of Alfonso d'Albuquerque who followed him that the abuses were allowed to commence which finally wrecked the Portuguese Eastern Empire.

Magellan.

Alliances were easily made and broken off in the Peninsula in the sixteenth century, as is shown by the history of Ferdinand Magellan. He was born in Portugal, the son of a minor noble, about the year 1480, and as a young man served as a volunteer in one of the early Portuguese voyages to the East. He later undertook a number of voyages in the East and also distinguished himself as a soldier, but finally he was dismissed from the service of the Portuguese on an allegation that he had been selling munitions to the Moors during the war. He immedi-

ately went across to Spain and tendered his services to Charles V, offering to evade the Papal Bull which gave to the Spaniards all territory to the West of a certain line and to the Portuguese all territory to the East. In the Pacific there were the Spice Islands and other territories which Spain wanted very badly but it was obvious that they lay to the East of the line and were therefore Portuguese. Magellan got over this by volunteering to sail round the world and to reach them westabout. Once they were firmly annexed without offending the Pope they could be reached by whatever method was convenient. He sailed in 1519 with a fleet of five vessels and by colossal efforts contrived to get into the Pacific through the Straits which now bear his name. He finally reached the Philippines where he got mixed up in a native quarrel and was killed for his trouble, while several of his men were executed by the party that he had befriended. Finally Juan Sebastian del Cana reached Portugal in the *Vittoria* with only thirty-one men of the original expedition, and was thus the first man to circumnavigate the globe. In addition to being an extraordinarily gallant navigator Magellan was a scientist far above the ordinary level of his time.

Sir Hugh Willoughby and the White Sea.

When the Company of Merchant Adventurers was first put on its feet it was determined to find a passage to China by way of the North East and Sir Hugh Willoughby, a Nottingham gentleman, was chosen to command the expedition. His flagship was the *Bona Speranza* and with him were the *Edward Bonaventure*, under the command of the famous Richard Chancellor, and the small *Bona Confidentia*. This expedition sailed in May, 1553, from London. The flagship sighted Nova Zembla (Novaya Zemlya) and eventually reached the Lapland coast where Willoughby and all his crew perished in the Spring of 1554. Chancellor found his way into the White Sea whence he proceeded to Moscow, stayed several months and opened up commercial relations which were developed under the protection of the Muscovy Company incorporated by Queen Mary in 1555. Chancellor led another expedition in that year and on his return voyage picked up the body of Willoughby and his papers. In 1556 three vessels sailed to the White Sea under Steven Borough in the *Searchthrift* and not only carried out very valuable surveying work along the Northern European coast but also in Nova Zembla and many of the Northern Islands. Chancellor, a very gallant seaman who did much for the exploitation of our trade in the North of Europe, perished in 1556 when the *Edward Bonaventure* was wrecked near Aberdeen while bringing over the first Muscovite Ambassador to the Court of London.

The Company of Merchant Adventurers.

The Company of Merchant Adventurers of England, already mentioned, was granted a charter in the year 1555 for the discovery of unknown lands and their exploitation. The twelfth Earl of Arundel was the moving spirit, together with Sebastian Cabot who was made a

Life Governor of the Company, but it was really a development of a very early trading guild in Brabant dating from 1296, which afterwards extended its operations to England. It worked very largely in the Netherlands and on the modern German coast and eventually it came to have its centre at Hamburg, whereby it was known as the Hamburg Company. It certainly did magnificent work in extending the bounds of England and also in increasing her trade, but the charter of incorporation that was granted to it by Queen Elizabeth in 1564 gave it so many privileges in the East that it came into very bitter antagonism with the East India Company. Its original purpose was the exploitation of British wool.

The Portuguese in the East.

Following hard on the discoveries of Vasco da Gama came the extension of the Portuguese Empire in the East. In 1500 they established themselves in a factory at Calicut on the Indian coast and three years later they built fortresses which seemed to render their position unassailable. Copying the Phœnicians of old their great care was that no whisper of their wealth should leak out to possible enemies, and this policy resulted in their being left practically undisturbed for nearly a century. When British ships began to take Spanish and Portuguese prizes, however, they learned a lot about the twin empires and soon made the most of their knowledge. The West offered better opportunities than the East and therefore the Gentlemen Adventurers attacked the Spanish before the Portuguese, but it was only a matter of turn. Meanwhile the Portuguese were making the most of their opportunities and had established a chain of stations from Ormuz in the Persian Gulf to the East Indies and beyond, fortifying the strategical points and maintaining a fleet to protect themselves from pirates and the "free-traders" or "interlopers" whom they were always expecting to come and break their monopoly.

The Dutch in the East.

To begin with, the Dutch attempted to find a North-East passage to the Orient as so many others had done, but the efforts of Jan Huygen van Linschoten, a Dutchman who had the enterprise to attach himself to the Portuguese for some years and learned as much about the East as they knew themselves, changed the course of things. Profiting by his knowledge a Dutch expedition of four ships went round the Cape in 1595 under Cornelis Houtman and in two years returned with the foundations of the Dutch East Indian Empire firmly established. They lost no time in digging themselves in and taking steps to keep out foreign competitors, especially the English.

The Foundation of the East India Company.

The policy of the Tudors had always been to encourage overseas trade by the granting of facilities and privileges to chartered companies which had the monopoly of trading in certain waters. By Elizabeth's day there was the Hamburg Company which has already been men-

tioned, the Russian Company, the Levant Company which lost so heavily when the Spaniards captured its convoy after the Armada, and many others. This Levant Company had a charter to trade with India by the Overland Route through Asia Minor and was colossally wealthy in consequence. When the sea route by way of the Cape had proved itself practicable certain members of the Levant Company—it must be remembered that these companies were really associations of individuals somewhat akin to the Lloyd's of to-day—turned their attention to its advantages. They knew perfectly well that they would have to fight the vested interests of the Portuguese and the Dutch in the East, but the prize was well worth it and accordingly the East India Company came into being. The scheme was discussed in 1599 and it was agreed that to prevent all chance of the trade being lost for ever immediate steps should be taken. After some difficulties the petition to the Queen was approved on December 31st, 1600, and the adventurers had the privilege of a monopoly of Indian trade for fifteen years, with exemption from export duty for the first four voyages and permission to take money out of the country for the purposes of their trade. It must be remembered that this old embargo on the export of coin was one of the great handicaps of the early traders, but it was honoured more in the breach than in the observance.

The First East Indian Expedition.

The privateering Earl of Cumberland was one of the first backers of the East India Company and the pioneer expedition included one of the ships which he had built specially for corsair work against Spain, the *Red Dragon*, which had originally been the *Mare Scourge*. They were allowed by their charter to take six ships but they could not raise them and the fleet which eventually sailed consisted of the *Red Dragon*, the *Hector*, the *Ascension*, the *Susan* and a decrepit victualler named the *Guest*. The fleet was under the command of James Lancaster. They sailed in the early summer of 1601 and crawled round the Cape with very sickly crews, only Lancaster having realised the value of limes as a preventive of scurvy and so keeping his own men in good condition. After a delay at the Cape they crossed the Indian Ocean to Acheen in Sumatra, where they were well treated by the Dutch in possession in spite of their orders from home to keep us out. In the meantime the ships put to sea and captured a rich Portuguese, the *Sao Thome*, with a full cargo. The *Ascension* and the *Susan* were filled up—principally with loot—and sent home while the rest of the squadron went on to Java and established a station there to collect goods against their next voyage. The homeward voyage was rendered difficult by a succession of storms and the usual murmurings of the men, but by heroic methods and magnificent seamanship Lancaster managed to overcome his difficulties and reached home. The promoters nearly doubled their capital after all expenses were paid and Lancaster received a well-earned knighthood.

Bombay.

The Dutch Wars did not have as much effect on the fortunes of British trade in the East as might have been expected, and did little to check the steady development of the Company. When Charles II received the town of Bombay as part of his wife's dowry it gave us an ideal base in Eastern waters and had a considerable effect on our operations. The Company established a dockyard there which permitted them to keep their ships seaworthy and greatly reduced the marine risk and finally, although not for a long time, they commenced to build ships there. Also they began to found their own local navy. At first it was for the protection of their ships from the pirates who operated from the Red Sea and East African coast, then against the French, and finally to take such offensive action as might be necessary in the Company's, and occasionally in Britain's, interests.

CHAPTER XII

Sea Rovers

Early Piracy.

To say that the Phœnicians were the first pirates would be grossly untrue, for it is probable that the gentleman who had that doubtful honour lived in the days when the capital ship was a tree-trunk and the owner's outstretched skins the sail. But they certainly developed the business at a very early age and found it a useful way of getting rid of their trade rivals, just as the civilised nations did many centuries later when they subsidised the Barbary Corsairs. The earliest records show that the Mediterranean was swarming with pirates and if Phœnician traders could venture out into the Atlantic it is more than probable that their pirates did too. One of the earliest recorded sea-rovers is Myoparo the Phœnician, whose name was perpetuated in a type of fast galley which was built without the usual beak bow for obvious reasons.

Mediterranean Piracy.

In the old days of Greece and Rome piracy was regarded as quite a gentlemanly profession in the Mediterranean, and in the struggle between Phœnicia and Greece the terms trader and pirate were interchangeable. The Romans not being so inclined for the sea, their development in this line was slower but it was nevertheless sure and in 67 B.C. Pompey had to carry out a big campaign which exterminated the pirates, but not until they had done infinite harm. All through the Middle Ages the Isles of Greece offered happy hunting grounds for the pirates and it is difficult to tell whether they or the Sardinians, Maltese and Genoese were the worst. Many disappointed Crusaders turned corsair in the Mediterranean.

Rollo.

One of the most celebrated of the Norman corsairs was Rollo, who in the heyday of the Viking power, when they practically ruled European waters, was strong enough to burn Bordeaux and to ravage a very large part of the French coast. His extraordinary daring was as celebrated as his cruelty and he took his handful of men as far inland as Rheims, Orléans and Poitiers. These campaigns of his lasted for thirty-six years but in the year 912 he was converted to Christianity and then devoted his whole efforts to exterminating the corsairs whose numbers had been multiplied owing to his example.

Saxon Pirates.

The Saxon pirates have already been dealt with under the heading of Vikings but the fact that the Norsemen were content to settle in the lands that they had conquered did not keep the Danes ashore. They not only spread over the North European coast but they kept big pirate fleets at sea and for many years held all European commerce in tribute.

Piracy by the Cinque Ports.

Secure in their privileges the actions of the Cinque Ports were often very little removed from piracy, and when Henry III was fighting with his Barons Henry de Montfort, Keeper of the Cinque Ports, openly fitted out a squadron and sent it to sea to take possession of any ship, English or foreign, that they met in the narrow waters. The crews and passengers were murdered and it was not until some sort of order had been restored to the country that these conditions were ended, although the Ports had a bad reputation for many years afterwards.

The Victualling Brothers.

The pirate organisations which sprang up during the Middle Ages are almost too numerous to mention but particular notice may be paid to the Victualling Brothers. Originally they were an irregular supply force which kept the fleets and bases of the Hanseatic towns victualled during the war with Denmark, but when this was over they remained as a corporation headed by two men named Moltke and Manteuffel. They operated from Gothland and covered both the Baltic and the North Sea, actually holding up the herring fisheries for three years and on one occasion attacking the Spanish coast. On these more ambitious forays the leader was generally Stortebeker, a ruined nobleman who earned this name among the pirates by his drinking capacity. Finally in 1400 things got so bad that the Hanseatic League determined that the band must be stamped out and a fleet under Simon of Utrecht, with his flag in the *Spotted Cow*—*Bunte Kuhe* is still often found as a name for Hamburg ships—contrived to rout the pirates off Heligoland in 1402 after a three days' fight. Some of the pirate ships actually had their mainmasts hollowed out and filled with molten gold.

The Barbary Corsairs.

Although it is an unpleasant thought, it has in fairness to be admitted that the Barbary Corsairs which were the scourge of the Mediterranean and even of Northern Europe for centuries were brought into being and maintained entirely by the Christian powers. When the Moors were in possession of Spain the greatest injury that they did was to Castilian pride, for their rule was enlightened and they were wonderfully tolerant in religious matters. When they were turned out of the country after bitter fighting and those who remained were subjected to appalling cruelties, it was a different matter and on the inhospitable African shore all that was savage in their natures came out. The Spaniards had called the tune and they could dance to it. At first their expeditions were for

the purpose of obtaining the necessities of life only and to rescue their oppressed brethren who were still in Spain, but every fresh batch of refugees brought fresh stories of atrocities, stories which had solid enough foundation but which lost nothing in the telling. It would have required little effort then to have crushed them, but the Spaniards did not take their opportunity and the Moors realised their weakness before it was too late. They got the necessary strength by putting themselves under the suzerainty of the Sultan and before long they had their ships' lists full of refugees and desperadoes from all over the Mediterranean. Until the Turks came their galleys were comparatively small and were manned Viking fashion by free men who would both row and fight. Then that was changed and they cruised for slaves as well as plunder.

The Scourge of the Mediterranean.

Having the advantage of a coast that was absolutely ideal for the purposes of piracy and being led by men who were among the finest seamen of their age—often renegade Christians—the corsairs soon made themselves formidable. They were always described as pirates, although they regarded themselves as the properly commissioned men-of-war of a State which was in open and continuous hostility with the Christian world. The fact that they were not hanged when caught but were treated as prisoners of war shows that their enemies regarded them in the same light. In addition they had the advantage of always being subsidised by one or other of the Christian powers, who took the short-sighted view that this was a good way to injure their trade rivals. Successive bombardments failed to reduce them and it was not until the French took possession of the coast in 1830 that they were really exterminated. The damage that was done to civilisation in less than four hundred years cannot be calculated, and practically all of it was preventable.

The Galley-Slaves.

The fate of the captive in the constant war between Christian and Turk was a terrible one, no matter which side had been his. The big galleys pulled as many as six men to the oar, all chained naked to their benches and packed tight to economise the scanty space. Perfect time had to be kept, the loom of the oar stretching over the bent backs of the men on the bench next abaft. One foot was pressed against a stretcher, the other against the edge of the next thwart, and in this way the rowers were able to get a firm purchase, rising to their feet with each stroke and throwing themselves back to get their full weight on to the oar. In times of emergency men were sometimes kept hard at it for as long as twenty hours at a stretch, by which time the crew was thinned terribly. The boatswain and his mates on the central fore-and-aft gangway plied their whips almost unceasingly. If the rowers were nearing the end of their powers pieces of bread dipped in wine were pushed into their mouths as they toiled, but the whip was never forgotten and when a man collapsed at his oar it was the only remedy that was ever con-

sidered. If he did not revive under this treatment he was unshackled and his body pitched into the sea, no matter whether life were extinct or not. The rowers in Christian ships were captives and convicts mixed ; the Turks always had a plentiful supply of slaves and when they ran short it only needed a raid to renew their numbers. Sometimes they were never unchained for six months on end, and yet there were men who survived this life for twenty years or more. Skilled captives were not sent afloat but were allowed to earn money as shipwrights, all the Barbary galleys being built by Christian slave labour.

The Barbarossas.

The most formidable and dreaded of the corsairs were the brothers Barbarossa—"Redbeard"—Uruj and Khair-ed-Din. They were born in Lesbos, home of pirates from time immemorial, and it is uncertain whether they were the sons of a Mussulman or a Christian. Uruj was the elder and had command of a pirate ship at an early age. His operations in the Levant brought him into contact with the Sultan's Navy and he decided to migrate to the West, whence rumours of the corsairs' doings were already coming and where his profession was regarded as a strictly honourable one. He soon had the good fortune to capture two Papal galleys whom he introduced to a new form of warfare, and pressed their crews into service as galley-slaves. Fortifying the island of Jerba as a base he was soon the greatest power in the Western Mediterranean, loyally backed by his younger brother. He established himself as a King on the African mainland but was always the sea-rover and finally goaded the Spanish into sending a huge expedition across for his extermination. Had he chosen to desert his followers he could have saved himself, but he turned back to the rescue of his rearguard who were trying to defend the passage of a stream and died fighting gallantly against hopeless odds, leaving Khair-ed-Din to continue his work and make an even greater reputation. At first he was hard pressed by the Spaniards, but he gradually collected his forces and in 1534 he was strong enough to capture Tunis and establish himself there. Charles V interfered and as a revenge Barbarossa ravaged the Balearic Islands. After that he was principally employed nearer home by the Sultan, who made him his admiral and chief and who had his hands full defending his own coasts. Finally he died in his almost regal palace in Constantinople but left a name of terror for many years afterwards.

The Battle of Prevesa.

Anxious only for wealth, it had long been the desire of the Venetians to remain at peace with Turkey, but this desire was not sufficient to check the piratical leanings of some of their seamen and finally the Turks under Khair-ed-Din Barbarossa determined to have revenge. He was pitted against Andrea Doria, and after heavy fighting in 1537 the Battle of Prevesa was fought in 1538. It should have been a victory for the superior Christian force, but as it was, an unsatisfactory action ended in the Turks holding the field. After that the corsair became a great

factor in European politics and Christian princes did not hesitate to ally themselves with him.

Siege of Malta, 1565.

When the Knights Hospitallers were evicted from Rhodes to the satisfaction of some of their Christian allies as well as their Moslem enemies, they established themselves in Malta and continued to harass the Turks as before. They only owned seven galleys at any time, a sombre black flagship and six blood-red followers, but they were so splendidly manned and equipped that they were regarded as equal to at least a score of the Turks' best ships. Accordingly the Sultan determined to exterminate them in 1565 and fitted out a wonderful fleet for the purpose. In the fortress were seven hundred knights and nine thousand soldiers, most of them hopelessly unreliable, while the besiegers mustered between thirty and forty thousand. Under the gallant, grim, bigoted old Grand Master, Jean de la Valette, a grand fighter still in spite of his seventy years, the garrison put up a defence unequalled in history. Finally, after terrible casualties and the loss of their leader, Dragut Reis, the Turks withdrew before the arrival of the Spanish relief force. Only five thousand Turks reached home; the gallant defenders were reduced to six hundred skeletons of whom scarcely one was unwounded. But the corsairs' reputation for invincibility was broken.

Lepanto.

Smarting under the defeat at Malta the activities of the corsairs were for a time increased, and were helped by the mutual jealousies of the Christian leaders sent against them. Dragut Reis had his successor in Ochiali, called by the Turks Fartas, "the scurvier." A Calabrian training for the priesthood, he was captured by the Turks and saved his skin by joining them and becoming one of their most successful, and certainly one of their most cruel, leaders. He was in the Western Mediterranean when the Turks conquered Cyprus in 1570, but later joined forces with Ali Pasha and ravaged the whole sea. Meanwhile the Christians were collecting their forces from all the maritime states and, to avoid the jealousies that had so often ruined their plans, placed them under the command of Don Juan of Austria, the twenty-two year old natural son of the Emperor Charles V, who was to prove himself one of the greatest heroes and finest leaders in Christendom. The two forces met in the Bay of Lepanto on October 7th, 1571, the Christian fleet of 285 sail carrying 29,000 men and the Turkish of 352 ships and 25,000 men. At the last minute Giovanni Doria with the right wing nearly wrecked the Christian chances by carrying out a fatuous and unauthorised manœuvre of which the redoubtable Ochiali took full advantage. Thanks to the leadership of Don Juan and the gallantry of his followers even this was unavailing and the day resulted in the total rout of the Turks with the loss of practically all their leaders except Ochiali. A hundred and ninety ships were captured, excluding those sunk, twelve thousand slaves were freed, and it was reckoned that twenty

thousand Turks had been killed. The butcher's bill on the Christian side was terribly heavy, but the battle put an end to the Barbary piracy on a grand scale and left only the minor freebooters who preyed on commerce for many years more but who could not be reckoned as one of the great military powers. Ochiali died after many years' service in more legitimate naval operations under the Sultan.

The Dutch Beggars of the Sea.

The Beggars of the Sea or Water Beggars came into existence during the gallant fight which Holland put up against Spain and were originally a purely patriotic society who found that amphibean qualities were of the greatest value in their guerilla warfare. When the Spaniards had the upper hand they were forced more and more to sea and were then none too particular as to whom they plundered, but they were principally patriotic in their aims and the organisation did not last any considerable time after the end of the war.

Elizabethan Pirates.

The naval activities of the Elizabethan fleets did a lot to put down piracy in British waters but as the rovers were driven from the more frequented trade lanes some went down to the Barbary coast and joined the Mohammedans there, while others established themselves in the Shetlands, Hebrides and on the North coast of Ireland, where the agents of the big London merchants would go to purchase their loot. In the Civil War the Sea Tories professed to be Royalists, but as a matter of fact they were out-and-out pirates operating principally in the Scillies and on the South Irish coast.

The Deep-Sea Pirates.

The real rovers of romance are the deep-sea pirates who really came into full being in the Stuart period. They were of all nations and it cannot be pretended that the English were not well to the fore. But generally speaking they were not the terrible cut-throats of our imagination, although there were always a fair sprinkling of that kidney. Conditions in the royal ships have already been described and they were certainly no better in the merchant service, the average shipowner doing and paying no more than he was absolutely forced to and the forcing machinery being very imperfect. So it came about that many seamen went a-roving to ward off starvation and nothing else; they generally confined their depredations to rather petty theft pending the opportunity to capture and rule a wonderful country—Mexico for choice—which was an aim which seems to have been in the minds of all of them. When trade boomed they went back to lawful work, but they never lost a chance of getting even with their oppressors and many a brutal captain was flogged, though seldom murdered. Cases were even known where they escorted a ship into safety in order that a "starvation" owner should not profit by her insurance.

CHAPTER XIII

The War of the Spanish Succession

The Outbreak of War.

When the Treaty of Ryswick was completed in 1697 it would certainly appear that Britain and her Allies had attained all that they desired against French aggression, but within a very few years the trouble was again in evidence. The King of Spain died in 1700 and left the Empire by will to Duke Philip of Anjou, who was grandson of King Louis XIV. This would mean that France practically obtained what she had desired for so long, the Rhine Delta and especially Antwerp. It seemed as though the whole war had been wasted, and had the King of France played his cards carefully it certainly would have been so. He was a man who would never be taught prudence, however, and before long he had committed the breach of the Treaty which was all that the Allies desired as an excuse to attack him. It was a bitter blow to King William, already disheartened by the death of Queen Mary, but war was not actually proclaimed until after his decease in 1702. Before he died he had perfected a plan which would have practically confined the sea struggle to American waters, but circumstances ruled otherwise and the Mediterranean became the principal centre of operations. This introduced entirely new considerations, for it was impossible to wage a war of this sort without some base and there was little enough neutral territory that was capable of acting as our ally, supplying our ships with a resting place. For the purpose of establishing a base a joint expedition under Admiral Rooke and General the Duke of Ormonde set out to capture Cadiz, although this was not the base that the Navy would have chosen and moreover was in a part of the country that was warmly in favour of the French candidate. The result was disastrous, for although the ships obtained certain advantages the attackers never contrived to lodge themselves effectively, and the constant quarrels of the Admiral and General prevented co-operation. Finally the force withdrew discomfited and with a great loss of prestige.

The Capture of Gibraltar, 1704.

Rooke and Ormonde had failed to secure Cadiz as a base, and although Lisbon was obtained through an alliance with Portugal this was

too far away from Toulon to permit the British force there to cover the French fleet. In 1703, owing to the absence of a suitable base, the British fleet was forced to return to the Downs where it was struck by the famous storm so vividly described by Defoe, many of the best ships going down with terrible loss of life. There is no doubt that this disaster had a good result in the long run, for it caused Rooke and Sir Cloudesley Shovel, who had by then joined him, to determine on the seizure of Gibraltar as a more appropriate base for the fleet. This was in 1704 and on the way round Rooke let slip a wonderful opportunity of destroying the French fleet, which in ordinary circumstances would have caused him to be court-martialled. He always had extraordinary luck, for while the capture of the treasure in Vigo Bay caused the Cadiz fiasco to be forgotten, so this blunder passed unnoticed in the triumph of Gibraltar. Rooke had under his command a powerful Dutch force; the fleet bombarded while a force of English and Dutch marines under the Prince of Hesse landed on the neck between the Rock and the mainland of Spain to cut communications. After a heavy bombardment an attack was made with the boats of the fleet and in spite of casualties by a heavy land mine, which really did as much damage to the enemy as to the landing party, the fortress fell surprisingly easily considering its extraordinary strength. Captured as a result of a disaster, Gibraltar remained with the English because the French ultimately succeeded in getting their claimant on the throne of Spain; had we won the war we would have ceded it to the Spaniards.

The French Corsairs.

The career of Jean Bart has already been mentioned, but although he died at the very beginning of the war of the Spanish Succession he left worthy successors who harried our commerce unmercifully. The first was the Chevalier de Saint Pol, who set out from Dunkirk in 1703 but cruised principally against the Dutch. Soon after he commenced his cruise he met a British squadron of two big ships and a heavily armed merchantman, and although his own force was inferior he attacked gallantly. The merchantman fell first, a frigate unfortunately made off to save herself, and H.M.S. *Salisbury* of 52 guns had to bear the whole attack, being forced to surrender after a two hours' fight. Saint Pol added her to his corsair squadron. Even more famous was Duguay Trouin. He was born in 1673 at St. Malo and was originally intended for the church, but he found the sea very much more attractive and fought with distinction in the war of the English Succession. He was only eighteen when he was given command of a 14-gun privateer with which he attacked shipping on the Irish coast. At twenty-one his command was a 40-gun ship, but he was captured and imprisoned at Plymouth, when he managed to make a spectacular escape. He received a regular naval commission shortly before the Peace of Ryswick and immediately the war of the Spanish Succession broke out he was active. In 1704 and 1705 he attacked the English coast at a score of points and three years later he captured a big English convoy

on his way to Portugal. In 1711 he went across to Brazil and took Rio de Janeiro, from which he exacted a heavy ransom. All this time he preyed on British commerce at every opportunity and contrived to inflict very heavy losses. Some of his operations were carried out on his own and others in conjunction with Claud de Forbin, an experienced seaman who had fought all over the world and had been with Jean Bart. Working a squadron out of Dunkirk he did a lot of harm to our commerce, but his commission in 1708 to convey the Pretender to Scotland was foiled through the activity of Admiral George Byng.

Another noteworthy corsair at this period was Cassard who hailed from Nantes and who captured not only a number of merchantmen but also some British men-of-war of considerable power. It must be remembered that these corsairs were not as a rule sailing in ill-equipped privateers but had an arrangement with the French Government by which they took over powerful men-of-war, while some of them had regular naval commissions and were in most respects naval officers.

CHAPTER XIV

The Struggles with France and Spain

The Young Pretender.

The activities of Prince Charles Edward, the Young Pretender, on the Continent were a source of very considerable embarrassment to the British Government. He had distinguished himself in action while still a boy of thirteen, and having all his family's personal charm and ability to win devoted adherents he seemed to have infinitely better chance of winning his aim than his less popular father. On the other hand he was not nearly as careful or thorough as the Old Pretender and would rush in where his father would see the risk and hang back. Thus it came about that the projected Franco-Jacobite invasion of 1744 was frustrated owing to a big storm scattering the French transport fleet under Admiral Roquefeuil which was to carry Marshal Saxe and his 7,000 men to England. The older man would have abandoned the enterprise and awaited a better opportunity, but the Young Chevalier was all impatience to be off and when no further French aid in force was forthcoming he sailed without it in the summer of 1745. He was carried in the small French brig *La Doutelle*, while his munitions were brought across in the corvette *Elisabeth*. The latter came upon a superior English man-of-war and turned back, but the Prince hung on to his hopes and landed in the Hebrides on his ill-starred rebellion of Forty-Five. His hopes were shattered on land, but by the devotion of his followers he contrived to regain his French refuge and it is only to be deplored that a Prince of his gallantry and opportunities should have sunk to the depths that he contrived before his miserable death in 1788.

Vernon and the Lower Deck.

When the country was alarmed at the progress made by the Young Pretender Admiral Vernon was put in command of the fleet in the Downs, but his irascible temper brought him into conflict with everybody. He was perfectly genuine in his espousal of the cause of the seaman, for whom he demanded far better treatment than anybody seemed inclined to grant at that time, but his methods were deplorable and he soon defeated his own ends. He then, in a luckless moment, resorted to the writing of pamphlets, a very common political method of the day but one in which he was exceedingly clumsy, while his opponents were masters. The result was that he was dismissed his command and struck off the list of flag officers in 1746, and although he

continued to represent Ipswich in Parliament until his sudden death in 1757, he was of no further service to the country.

The Actions off Finisterre, 1747.

The ill luck of the French in the distant seas caused them to fit out two expeditions, one under the Marquis de la Jonquière for the recovery of their colonies in North America, and the other under Admiral Grou de St. Georges to attempt to turn us out of the Indian coast. They sailed together with their convoys for their better protection against the English, but in the meantime Anson and Rear-Admiral Peter Warren had commissioned a squadron to intercept them. The two fleets met off Finisterre on the 3rd of May, 1747, and, very largely owing to the poor support given to the French Admiral by his armed East Indiamen, the French sustained a serious defeat which was prevented from being final by nightfall. Anson was given a peerage and Warren knighted, while no less than £300,000 in specie fell to the victors as part of their booty.

In October of the same year Rear-Admiral Edward Hawke was at sea with a squadron which was ordered to intercept a large convoy which France was collecting in the Basque Roads for dispatch to the West Indies. He succeeded in doing this off Finisterre. The French under Admiral Herbiere de l'Etenduère fought with the greatest gallantry and skill, but they had no chance against the superior English force and of their eight big ships six were taken. The remaining two were pursued by our frigates, but not only did the English force fail to prevent them getting to Brest but it lost Philip de Saumarez, who was killed in command of the *Nottingham* and was a very serious loss to the Navy. The French had damaged Hawke's ships badly aloft, so that he decided that it would be unwise to try to pursue the convoy that had been getting away in charge of two frigates, but he sent a sloop to warn British ships in the West Indies and many of their vessels were subsequently taken. It was a decisive and important victory for the English but the greatest credit must go to the French Admiral.

The Peace of Aix-la-Chapelle, 1748.

From the early Spring of 1748 peace negotiations had been going on in Aix-la-Chapelle which were finally agreed upon in October. The terms included the general restitution of conquests and the settlement of numerous disputes between minor Mediterranean powers. Of more importance to England was the fact that she was granted the right to send one ship a year to the Spanish colonies and the Protestant Succession to the English throne was recognised. Later the British attitude with regard to Spanish Colonial trade was modified in return for a grant of £100,000. Even the original and ostensible cause of the whole war was remembered and the right of Maria Theresa to the Habsburg Crown was established.

The Seven Years' War.

Peace was not to be of very long duration, for a coalition between



(Macpherson Collection)

PORTSMOUTH ABOUT 1700
(ENGRAVING BY HULSBERGH AFTER LIGHTBODY)

It the end of the Stuart period Portsmouth was regaining the position as the premier naval port which it had to some extent lost in favour of Chatham.



THE CAPTURE OF BARCELONA, 1705

Shovel and Leake in charge of the Fleet, and the Earl of Peterborough in charge of the Army, succeeded in capturing the town from the French and made a material difference to the progress of the war. (From a print lent by Messrs T. H. Parker)



THE WRECK OF THE "ASSOCIATION" AND OTHERS ON THE SCILLIES, OCTOBER, 1707

Owing to the poor navigation of the time Sir Cloudesley Shovel led his fleet on to the Scillies, and he himself was drowned with many others. They had reckoned that they were off Ushant.



THE BURNING OF THE "DEVONSHIRE," SEPTEMBER, 1707

After maintaining a gallant running fight for the greater part of the day with five Frenchmen, the 80-gun ship Devonshire caught fire and blew up, only two of her crew of five hundred being saved.

Austria, France, Russia, Saxony and Sweden was formed with the idea of crippling Frederick the Great and his rapidly growing power. Principally for Imperial reasons England threw in her lot with Prussia and the greater part of the war as far as the British were concerned was fought in distant seas. Frederick struck the first blow by invading Saxony at the end of August, 1756, and almost immediately afterwards the British Navy was embroiled. Really the war was only more or less of a pretext for this, for in the previous year French aggression in North America had caused Boscawen to be sent to the Gulf of the St. Lawrence with a force to intercept the troops which they were sending out there. The line-of-battleships, *Alcide* and *Lys*, armed *en flûte*, were the only two ships immediately captured and were followed by a general seizure of French merchant ships wherever found. Louis XV immediately prepared to invade England, a plan that caused considerable panic which the actions of the Government did nothing to dispel.

Minorca.

One of the great objects of the French at this time was to seize Minorca, which gave England an excellent base in the Mediterranean and was a constant threat to French naval power there. They made no secret of their intentions, but the British Government did nothing to strengthen the base and left it with a tiny garrison under a gallant officer eighty-two years of age. When at last the position became alarming Vice-Admiral John Byng was given command of a fleet and ordered to relieve the island, but the force that was put at his disposal was ridiculously inadequate, consisting of ten ill-found sail of the line. A plea for reinforcements from the strong forces wasted in home waters was refused and Admiral Byng was not even allowed to draw on these ships for men. On the 20th of May, 1756, he met a French squadron of roughly equal force but unfortunately better manned and found. Byng attacked, but rather clumsily, and the English force was wasted while the ships were considerably crippled aloft by the French fire. Unfortunately he did not act with the dash which, judging after the event, he might have done. At the subsequent court-martial it appeared that he was deterred by the unsatisfactory sentence passed on Admiral Mathews, but the fact remains that the action was quite undecisive, while the French, considering that the capture of Minorca was their main object, crippled his ships too severely to permit a pursuit. The result was that Byng returned to Gibraltar and left the island to its fate; there he met the reinforcements that should have been sent out to him long before. Before the Admiral had sent in his version of the action the country was already ablaze with indignation, and as soon as possible he was superseded, tried by court-martial in a manner that did not give him the least chance, and sentenced to death. At the same time the court spoke very strongly of having to pass this sentence on a man who might have been guilty only of an error of judgment and put in a strong plea for clemency. This, however, was unavailing, and the Admiral was shot on the quarter deck of the *Monarch* on March 14th,

1757. He died as gallant a death as any man could and the whole affair is now universally, and was then quite generally, regarded as a gross miscarriage of justice.

The Situation in the East.

In India the British were in no better position than they had been for many years and immediately the Seven Years' War broke out France saw her opportunity of causing trouble there. A number of French transports were ordered out and it was plain that when they had landed their troops the policy was to arm them and commission them as men-of-war against British commerce. At the same time Surajah Dowleh, the native ruler of Bengal, had taken the opportunity to assault British posts and had slaughtered a number of English residents in most appalling circumstances in the infamous Black Hole of Calcutta. Vice-Admiral Charles Watson was Commander-in-Chief on the East Indies station with a considerable squadron and had just received orders to return to England when he received information of this atrocity. He had the strength of mind to act as he thought fit and disregarded them entirely, reinforced his squadron as much as he could by local purchases and sailed for Calcutta in December, 1756. The fort of Bougee-Bougee was expected to give a lot of trouble and preparations were made to attack it, but while these were in progress a drunken seaman named Strachan found his way in and so surprised the native defenders that they fled for a moment, but long enough to give an attacking party time to establish themselves. Reprimanded for drunkenness, Strachan was heard to remark that "he'd never take another fort single-handed again as long as he lived." This unexpected success broke up the defence and in spite of the strength of the place the English possessed themselves of it with remarkably little trouble. Watson followed up his success with remarkable energy and co-operating with Clive on shore soon forced the natives to sue for peace and gave the British an opportunity of devoting their attention to the French. Soon after the Battle of Plassey had completed for the time the work that he had begun so well, Admiral Watson died, a magnificent type of naval officer who has received all too little honour.

Minor Operations.

While these major operations were going on in the West and the East there were a number of minor operations carried out with skill and gallantry, some of the single-ship actions in particular being magnificently fought. It was not easy sailing and not all of the ventures were successful, but generally speaking they were well-conducted and added numerous spots of red to the map. Among many may be mentioned Hawke at the Isle of Aix, Pocock's series of fights with the French Commander D'Aché in the Indian Ocean, Howe at Cherbourg and Boscawen's victory off Lagos.

Quiberon Bay, 1759.

Meanwhile the French prepared an invasion of Great Britain on a

very large scale. England, Ireland and Scotland were to be attacked simultaneously. The Irish force was to sail from the Morbihan escorted by the Brest and Toulon squadrons. - England was to be attacked by a big flotilla of flat-bottomed boats collected at Havre, while a diversion on Scotland was to be carried out by five frigates from Dunkirk and a landing force. The Western squadron, whose duty it was to watch these operations, was under the command of Admiral Sir Edward Hawke, a magnificent seaman and a man of remarkable character. Loyal to his seniors to the last degree he was just as careful of his subordinates, but he was quick to take offence and in those days a keen Admiral with his heart in his work generally had plenty of reason. The Admiralty were offended by his constant pleas for the care of the lower deck and tried to relieve him, but he was too strong for them and the public were solidly behind him. Hawke himself maintained the closest possible blockade on Brest. In the worst of westerly weather, knowing that the French would be bound by it, he got off the lee-shore and sheltered in Plymouth or Torbay, but he was back again as soon as the wind changed. Admiral de Conflans waited his opportunity in Brest, but the Toulon squadron had been cut up by Boscawen. However, he had practically the same force as Hawke and his ships were fresh, while the British were worn out. In November the weather got so bad that Hawke was forced to leave the coast for a short time, and while away Admiral Bompard from Martinique slipped in and joined de Conflans at Brest, bringing him a very welcome reinforcement of first-class seamen. Distributing them through his fleet de Conflans sailed on the 14th of November, 1759, with twenty-three ships of the line, while Hawke was hurrying back to his station with twenty-one. Knowing that the French would go to Morbihan to pick up their transports he determined to cut them off, passing into Quiberon in bad weather. The pilot demurred that it was suicide and Hawke quietly heard his protest and then told him to carry on. A magnificent action was fought under the worst of conditions, Hawke in the *Royal George* well in the van. Attempting to save the French flagship *Soleil Royal* their 74-gun ship *Superbe* checked her way to get between the two flagships. She received the full broadside of the *Royal George* just as she was lifting on a big roller and sank like a stone with the greater part of her gallant company. Two English ships were lost among the dangerous reefs but the French fleet was entirely dispersed. Their Admiral escaped to shore half naked when his flagship was burned and in all six line-of-battleships were destroyed or captured. Seven more jettisoned their guns and stores to get over the bar and could never get back again, while the remnant contrived to escape into Rochefort. It was a wonderful victory and saved England from the fear of invasion at a cost of three hundred casualties, but immediately afterwards Hawke was forced once again to complain about the wretched supplies sent out to him. A popular ballad of the period ran :—

Ere Hawke did bang Monsieur Conflans
You gave us beef and beer ;
But now he's beat we've nought to eat,
For you have nought to fear.

Thurot's Expedition.

In the year after Quiberon the French Commodore Thurot, who had been given the protection of the expedition that was to sail against Scotland, attempted to carry out his scheme. He slipped past the blockade at Dunkirk, turned up at Gothenburg and thence went to Bergen. Three of his ships returned to France and his whole force was chronically discontented. However, the Commodore insisted on pressing on and, landing some six hundred men at Carrickfergus, captured the town. The advance on Belfast was prevented by the internal dissensions of the force and the expedition prepared to return to France. On the way up Belfast Loch it met Captain John Elliot and his three frigates detached from Hawke's fleet, who had no difficulty in capturing the whole French force. Thurot was killed in the fight and in him the French lost one of their most gallant and dashing corsair captains. Born in 1726, François Thurot was apprenticed to a druggist and at the age of eighteen sailed as surgeon of a privateer. Soon he was in command and did magnificent service for the French Navy, from whom he eventually received a commission. The subject of great jealousy by his compatriots, he was honoured by the British fleet more than any other enemy, and it was always said that throughout his career he was never tempted away from the path of the strictest rectitude and no incident ever besmirched his personal honour.

The Capture of Belleisle, 1761.

In 1761 it was determined to take Belleisle, which occupied a very important strategic position on the coast of France. Commodore the Hon. Augustus Keppel was given the task with a powerful fleet and sailed at the end of March. Ten thousand troops were carried under the command of Major John Studholm Hodgson. The first landing was beaten back and then operations were suspended for some time by bad weather, but the second was more successful and finally the citadel surrendered on the 7th of June. It was another occasion on which success followed harmony between the naval and military commanders and it did much to wipe out the stain of Minorca.

The Peace of Paris.

The final stage of the Seven Years' War came about through Spain throwing her Navy into the struggle beside France through the "Family Compact." This gave England the opportunity of an excuse to attack Havana and Manilla. Finally peace came about through the Treaty of Paris, which was signed on the 3rd of November, 1762.

CHAPTER XV

Pirates, Smugglers and Slaves

The Eighteenth Century Smugglers.

Mention has already been made that in the early days the smuggling trade was wool out of the country rather than dutiable goods in, but in the Tudor and Stuart period the levy of tonnage and poundage caused a good deal of running in. Charles II had instituted a patrol of Custom House smacks which were the predecessors of the revenue cutters of a later day. Goods were run in all along the South and East coasts and wool was run out principally from the Romney Marsh, where the quality was famous and always found a market in France and Holland. William III took stronger measures to thwart the smugglers, or "owlers" as they were generally called, partly for the protection of his revenue and partly because he knew that they were carrying on a treasonable correspondence with France. He stationed a number of small men-of-war between the North Foreland and the Isle of Wight and prohibited any person living within fifteen miles of the sea from buying wool without sureties. Soon afterwards special attention was drawn to the fact that quantities of spirits, especially brandy, were run into Deal from the ships that were generally to be found weather-bound in the Downs, and from that day to this the Deal boatmen, who are among the finest seamen in the country, have had a reputation for smuggling which they appear to have regarded as a very venial offence. William III and Queen Anne also instituted a land force of riding officers and surveyors, their special purpose being the prevention of illegal wool export. Dragoons, who were really mounted infantrymen, were also employed on the preventive service under the orders of these riding officers and generally proved very inefficient.

Laces and Silks.

During the reign of Louis XV France had become the great producer of laces, silks and fine goods, and exported considerable quantities into England. The War of the English Succession put an end to this trade and after the Peace of Ryswick they were heavily taxed as luxuries. The Jacobite sympathisers in England found it suited their ends to encourage the smugglers, both as a means of embarrassing the Government and also as a means of maintaining communication with their friends in France. There was a slight decrease in the early days

of George I, but when the Government had its hands full with the wars with France and Spain the impertinence of the runners—or freetraders as they preferred to call themselves—was extraordinary. Only weaklings and inefficients were left for the preventive duties, so that the smugglers would form a powerful cavalcade and ride quite openly through the country, confident that if they met a body of dragoons they would be strong enough to beat them off or, if they were forced into flight, that they could evade the pursuit by strategy. Kipling's *Smugglers' Song* reads :

If you wake at midnight and hear a horse's feet,
Don't go drawing back the blind, or looking in the street,
Them that asks no questions isn't told a lie.

Watch the wall my darling, while the Gentlemen go by !

Five and twenty ponies,
Trotting through the dark—

Brandy for the Parson,

'Baccy for the Clerk ;

Laces for a lady, letters for a spy,

And watch the wall, my darling, while the Gentlemen go by !

The practice of making the villagers turn to the wall when they heard a cavalcade approaching was more for their own protection, so that they could swear to the authorities that they had not seen the smugglers, than because of any fear the latter had of what the authorities might be able to do to them.

The Patrol of the Narrow Seas.

The Revenue Force was constantly being increased and King's ships were given strict orders to assist the Revenue Officers at every opportunity—orders which frankly they disliked obeying very much indeed—but still the trouble went on and increased. The heavy duties which William III had imposed were continued by his successors, and history has clearly proved that smuggling only exists when it is worth while and that the quickest way to put an end to it is to reduce the duties. International Law also added to the difficulties of the preventive service, for the English were not the only smugglers at sea, and when they saw the profits that were being made the French commissioned a number of armed luggers who were quite ready and able to beat off the average Revenue sloop in open waters.

The Revenue Sloops.

Whatever may have been the faults of the preventive service—and there is no denying that they were many—it brought into existence a magnificent type of sloop for patrol purposes. These ran up to a hundred tons and over, carried a big sail area and were handled like little tops. The first sloops were hired fishing smacks and it was from this eminently practical and satisfactory rig that their own was evolved. They patrolled practically all round the coast, for there was just as much smuggling in the West as in the Channel, and the Isle of Man with its

jealously guarded privileges made an excellent base.

The Revenue Personnel.

The personnel of the Navy at this time was unsatisfactory enough but it was good compared with that of the revenue service, where matters were most unsatisfactory in every particular. The smugglers were so willing to put up a fight that big crews had to be carried and in such small vessels the discomfort was acute. The service had no traditions and the officers generally commissioned into it were not of the best type, or even of a passably good type. One of the hardships was that they had to prosecute their prisoners at their own expense, and not unnaturally they took very good care that they were not out of pocket in the long run. The discipline of the service was very weak and if a commander fulfilled his instructions to hand over troublesome men to the nearest man-of-war for service on board he found that he had great difficulty in filling their places. A very large proportion of both officers and men were hand in glove with the smugglers, who included their own kith and kin. On top of it all the whole countryside was far more in sympathy with the smugglers than with the revenue service, so that they found themselves regarded with the greatest distrust by their friends when they returned to their homes.

The Smuggling Districts.

Reference has been made to the Isle of Man as a smuggling base, and similar advantages were enjoyed by the Channel Islands where there still exists a colossal system of cellars going back to smuggling days. The men of Kent and Sussex were known as the worst of their type, chiefly because they added appalling savagery to their lawlessness. The men of Cornwall were just as bad at smuggling but were far more good-natured over it and in many ways corresponded to the accepted picture of the smuggler of romance. The Yorkshiremen imported from Dunkirk and Flushing and the Scots from the Dutch and German coasts.

The 1745 Committee.

By the year 1745 something had to be done. The revenue obtained from Customs duties had dropped alarmingly, while the expenditure at the time was very considerable. The traders of the country who paid duty found that they could not make a living and were constantly complaining bitterly to the Government. In addition it was certain that the Jacobites who rose in that year had kept touch with their friends through the smugglers. Therefore a committee was appointed to enquire into the whole matter. This committee gives us some very interesting information as to the trade of those days, but it did very little towards its suppression. The smugglers had a magnificent intelligence system at home and the very active assistance of the French authorities who saw in their calling an excellent and inexpensive method of hurting England, while at the same time they made money.

The Fishermen's Method.

It must be remembered that most of the South coast smugglers were nominally fishermen operating in big cutter-rigged smacks very much akin in design to the smaller revenue craft. They would leave their fishing ports perfectly openly with small crews and would be met off shore by a number of boats which could slip out without suspicion and from them took the bigger crew necessary for their work, as well as money and such merchandise as they intended to barter. Having collected her foreign cargo the smack returned to the rendezvous, gave the signal and was met by the shore boats again, who took from her the extra men and the smuggled cargo. The smack then returned to port with her original crew and complained what poor fishing she had had. In addition the bigger open boats ran the whole passage themselves, a passage that called for magnificent seamanship and daring. Other open shore boats collected the dutiable goods from incoming merchantmen, the East Indiamen having a specially bad reputation in this respect.

The Deal Smugglers.

The propensity of the Deal boatmen for smuggling has already been mentioned, and it has to be admitted that their audacity makes one forgive many of their sins. There was one party in 1643, for instance, who had captured the Dover Customs House smack, run a cargo of smuggled goods in her across the Channel and then returned her. Not all of their exploits were of this character, however, for on one occasion an East Indiaman anchored in the Downs was betrayed to the famous Swedish privateersman, Cross, a renegade Englishman, by a Deal lugger slipping across the Channel and informing him what a rich prize she would make on account of the money that she had on board. This was not the only occasion on which the smugglers betrayed British ships to the enemy, and in addition there were many murders to their discredit. In an open fight with the preventive officers they naturally fought hard and if somebody got killed it was only what might have been expected. But taking a man prisoner, binding him so that he could not possibly swim and then dropping him overboard in the middle of the Channel was very different.

The Hawkhurst Gang.

Perhaps the vilest piece of villainy on the part of the smugglers was the history of the Hawkhurst Gang in 1744. Hawkhurst was a Kentish village right inland, but the whole of the county was mixed up in the smuggling business and the gang in this particular neighbourhood was under the command of Kingsmill and Farrall, names which deserve to live in the history of crime. At the end of 1744 they captured a patrol of four revenue officers at Shoreham and carried them to their village where they were flogged mercilessly. Then two were allowed to go, while what happened to the others has always been a mystery. It may have been that they were murdered or it may have been that they were taken across to France and left to explain their business there as well as they could, a favourite habit of the smugglers. Unfortunately the law



(Macpherson Collection)

H M S NOTTINGHAM " CAPTURING THE " MARS "
(ENGRAVING BY PARR AFTER MONAMY)

Although she was hopelessly overmatched and had a very sickly crew, the French frigate Mars put up a magnificent fight for two hours before she finally surrendered.



(Macpherson Collection)

THE SHOOTING OF ADMIRAL BYNG ON BOARD THE "MONARCH"
(FROM A CONTEMPORARY ENGRAVING)

The execution of Admiral Byng "pour encourager les autres" is still one of the most discussed incidents in British naval history



(Macpherson Collection)

DEFEAT OF A FRENCH SQUADRON OFF CAPE FRANCOIS, OCTOBER 21, 1757
(ENGRAVING BY CANOT AFTER PATON, 1759)

In this action, fought on what was later to be Trafalgar Day, the Captain Suckling who first took Nelson to sea greatly distinguished himself.



(Macpherson Collection)

ENGAGEMENT BETWEEN THE "FLAMBOROUGH" AND "BIDEFORD" AND TWO FRENCH FRIGATES, 1760

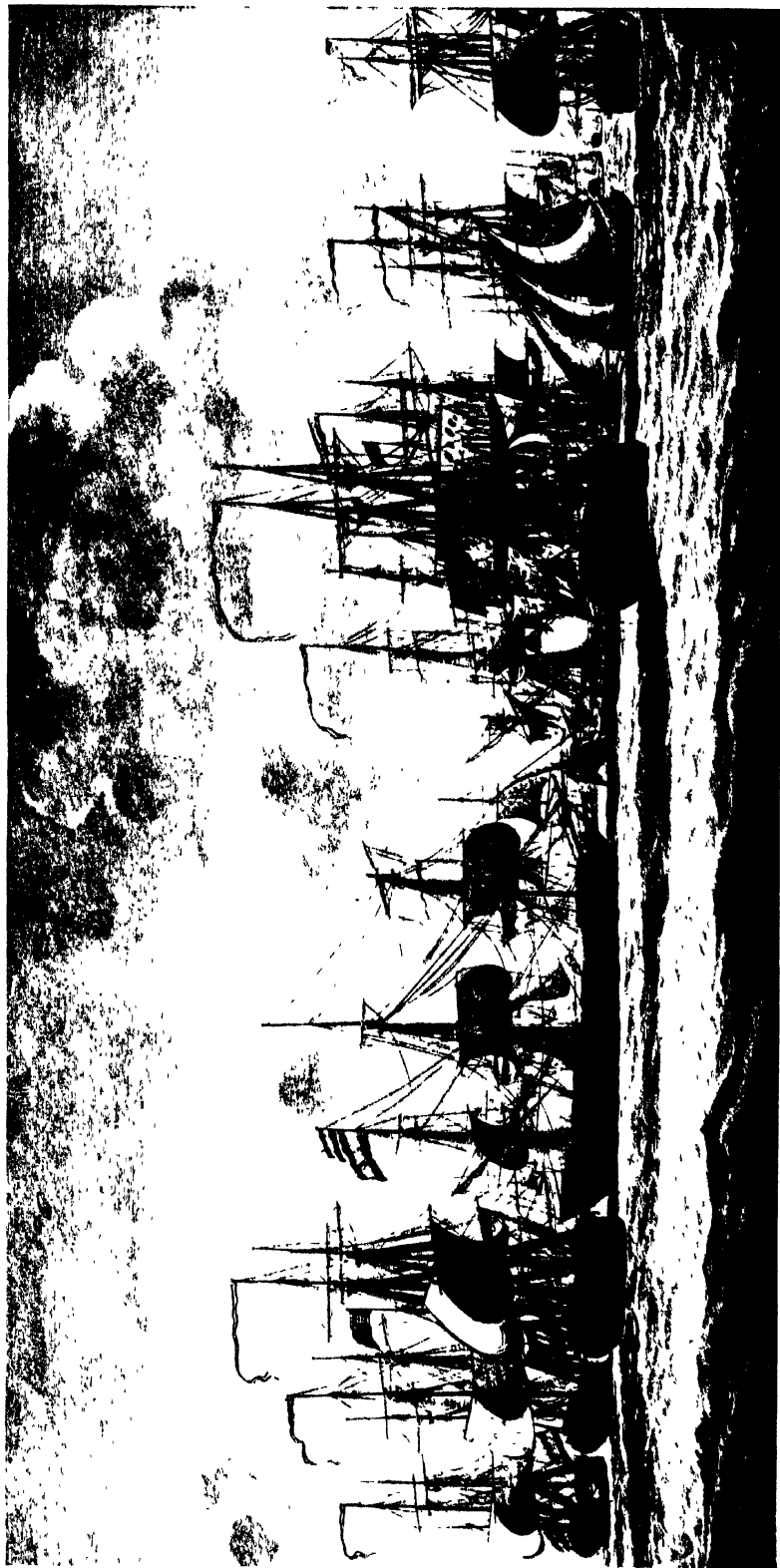
(MEZZOTINT BY HOUSTON AFTER HOOD, PUBLISHED 1761)

Although the British ships had only twenty guns apiece, they contrived to maul the two French 32-gun frigates so severely that their convoy reached Lisbon in safety



LIEUTENANT NELSON VOLUNTEERING TO BOARD A PRIZE IN A VIOLENT GALE,
NOVEMBER 20, 1777
(ENGRAVING, AFTER R. WESTALL, R.A.)

*The famous artist's idea of boatwork is perhaps open to criticism,
but the picture is a popular tribute to Nelson's seamanship.*



ENGAGEMENT OFF THE DOGGER BANK, AUGUST, 1781

Although it was fought at a time when tactics had begun to be studied, the Dogger Bank action between the English and the Dutch was fought hammer-and-tongs as suited the taste of both parties

(From a print lent by Messrs F. H. Parker)



(Macpherson Collection)

DESTRUCTION OF THE SPANISH BATTERING SHIPS BEFORE GIBRALTAR, 14th SEPTEMBER, 1782

The Spaniards came into the war purely for the purpose of regaining Gibraltar and Malta, and the siege of the former fortress is world-famous. The garrison resorted to the use of red-hot shot for the purpose of beating off the fiercest attack.

was too weak to inflict the punishment that should have been received, with the result that little more than two years later they started to terrorise the county and finding offence in something that was said in a neighbouring village they sent warning that they were coming to wipe it out. They tried, but happily they were beaten back with a considerable number of casualties. Shortly afterwards they gathered some other bands together and crossing the country to Poole they attacked the Custom House there and took away all the tea they found. It worked out at rather less than thirty pounds a head, but it must be remembered that in those days tea was a very expensive commodity.

The Sequel to the Poole Outrage.

The attack on the Poole Custom House was entirely successful, but the authorities finally began to move in the matter and finding a shoemaker who could give them information they sent him to Sussex in charge of an aged Custom House officer named Galley. At Rowland's Castle the hostess of the inn, who was in league with the smugglers as a matter of course, gave warning and a party of fourteen descended on the inn and captured the luckless pair. Lashing them to their horses they started to take them to Hawkhurst, and amused themselves on the road by beating them about the head with their whips, considering it hugely diverting when the poor wretches lost consciousness and rolled over head downwards to have their faces kicked by the horses' hoofs. More dead than alive they arrived at the end of their journey, where Galley was buried alive and Chater the shoemaker was again tortured and finally thrown down a well. They then murdered one of their associates whom they accused of having stolen some of the spoil, although as a matter of fact it was in the hiding-place that they themselves had chosen for it. It was a year later that the authorities contrived to make a number of arrests, and finally the whole gang were duly hanged for this and other crimes.

The Slave Trade.

How the slave trade started owing to the efforts of Hawkyins and despite the forebodings of Queen Elizabeth has already been described, and by the end of the seventeenth century it had attained very considerable proportions. The Royal African Asiento Company had very strong rights in this matter and had a contract to supply the Spanish settlers in the West Indies with slaves. Its depôt was at Kingston, Jamaica, and it did a huge business until its charter was cancelled by the Bill of Rights and the company broken up in 1698. The slave trade was then open and increased rapidly, the morals of the time seeing no harm in it. At first London and Bristol were the great ports and the business was arranged on the scientific principle of a round voyage. To begin with, Liverpool had practically no share in the trade, but the rise of the Lancashire cotton business and the proved superiority of Manchester products over those of France and Germany gave them a much better chance and in 1720 London dropped out. For a time Bristol and Liverpool were in the keenest rivalry but the Mersey port

steadily outstripped the Severn and finished up with the cream of the trade. Liverpool slavers were soon able to undersell their rivals by some pounds, although it was suggested that the reason of this was that they paid their servants so little and found their ships so badly. Certain it is that round about 1730 there were quite a large number of Liverpool slavers at sea whose burthen did not average more than seventy-five tons apiece.

The Tragedy of the "Ogden."

There is absolutely nothing that can be said in favour of this trade in Black Ivory except that labour was very necessary for the development of the new lands, but unfortunately those in charge of the business did not even possess an elementary knowledge of how to make the most of the human material. The mortality was terrible, especially in war time when the slaves not only risked death in their own fights with their captors and in the appalling condition of the slave ships, but also stood very little chance when the slaver was brought to action. This was the case when the *Ogden* of Liverpool in 1747 encountered a Spanish privateer while carrying a cargo of slaves from the West African coast to Liverpool. The crew put up a particularly gallant defence which so incensed the Spaniards that when they finally got possession of their prize they cut the throats of every soul on board, white and black. Of a big company only a few escaped by swimming.

The Price of Slaves.

The price of slaves varied enormously according to the year, the district, and the condition of the wretches. Round about 1760 to 1770 good negroes would fetch anything from £27 to £50, the highest price being paid in the Southern States and especially at the Charleston market. About the same time the freight between the African coast and South Carolina ran to round about five pounds a head of those delivered "in good condition, the danger of the seas and mortality only excepted." In addition there were generally export duties to be paid to the native ruler, frequently estimated in ankers of brandy, gunpowder, guns or iron bars.

The Massacre at Old Calabar.

Of all the innumerable atrocities connected with the slave trade perhaps the worst was the massacre at Old Calabar in 1767. At that time there were several Bristol and Liverpool slavers lying in the Old Calabar River and there was a quarrel going on ashore between the Old Town and the New Town. The slave shipmasters met together to see how this quarrel might be turned to their advantage and accordingly the chief of Old Town was invited to come on board with his principal followers, under promise of protection, in order that matters might be adjusted. They accepted with alacrity but as soon as they were on board, with numerous adherents alongside the ship in canoes, the captain of the *Duke of York*, backed by his crew, attacked his guests, who vainly attempted to escape out of the cabin windows. At

the same time their canoe was sunk by gun-fire and other ships dealt with the other canoes in similar fashion. Such fugitives as contrived to reach the shore were immediately dispatched by their native enemies, so that very few even survived to go into slavery. Though this massacre was the worst and most famous of many, it was not by any means alone.

Slavery in England.

There are many stories afloat of slavery in England, and visitors to the Goree in Liverpool have been shown tethering hooks under the colonnade where the slaves were supposed to have been chained. Quite apart from the impossibility on account of date there is little enough foundation for this story. There never was a regular market for native slaves in England, but there were numerous instances of single slaves, generally paid servants, being advertised for sale and changing hands. The end of this came in 1772, although the question of the status of slaves in England had been discussed by lawyers since 1729. The test case concerned a negro named Somerset, who was lucky in having the advocacy of Granville Sharp. After long discussions Lord Justice Mansfield delivered the famous decision that as soon as a slave set foot on the soil of the British Isles he became free.

The Slavers' Methods.

It must not be thought that the slave trade was entirely a case of white against black, for the principal allies of the slavers were the native potentates on the coast. Every now and again these native rulers would blackmail their customers for higher pay and occasionally fierce fighting took place on this account. As the natives generally insisted on gunpowder and guns in payment of their services and of export dues they were frequently able to put up a very tough fight, although it must be confessed that the trade weapons that they received were generally more dangerous to themselves than to their enemies.

The Build and Fittings of the Slavers.

The slaving ships and the privateers were about the only vessels built in the eighteenth century with speed as a primary consideration, their cargo being somewhat cynically described as "perishable." To take a typical ship of the better type at the end of the period, the famous Liverpool slaver *Brooks* was described officially as follows: Length of lower deck, 100 feet; inside beam, 25 feet; depth of hold, 10 feet; 'tween-deck height, 5 feet 8 inches. The accommodation was divided, the men's room on the lower deck being 46 feet by 25 feet 4 inches, with a six-foot platform running along either side. The boys' room measured 13 feet 9 inches by 25 feet and the women's room 28 feet 6 inches by 23 feet 6 inches, a similar platform in each case. There were 14 air ports to ventilate this ship and she was pierced for 20 guns. Her tonnage was rather less than 300 and she had a crew of 45, while although she was only licensed for 450 slaves the actual number that she carried on one occasion must have been nearly 700. She arrived

at Jamaica with 646, and there was always heavy mortality on the passage. For the slaves she carried 20 tons of various grains and pulses, from Indian corn to split beans, two tons of bread, a large number of yams, and a certain amount of fish. From the Gold Coast to the West Indies the passage was reckoned as between 42 and 50 days but very frequently it ran into eight weeks and more. Instances were known of ships losing fifty slaves and more in a single gale, and should the voyage be unduly prolonged and provisions run short it was quite usual simply to throw the slaves overboard to the sharks which always followed the ships and were never disappointed. If a slave ship was wrecked her living cargo was usually left on board, chained as usual, while the crew saved themselves. A very large number of the negroes tried to commit suicide and special efforts were made in the design of the ship to prevent them jumping overboard, although this very frequently happened. Voluntary starvation was another method by which many found a relief in death.

The Case of the "Zong."

Instances of the appalling brutality of the slavers and the horrors of the slave trade can be multiplied indefinitely, but the case of the *Zong* may suffice. This came out through the Liverpool owners of the ship suing the underwriters in the year 1783 for a number of slaves lost during the passage. It turned out that their cargo was a sickly one and that many had died at sea. The captain and mate therefore came to the conclusion that as, if they died on board, their owner would have to pay for them, while if they committed suicide by jumping overboard the loss would fall to the underwriters, it would be better to get them overboard and accordingly threw into the shark-infested sea over 130 living negroes who looked as though they might fall sick. It may be mentioned that to many of them it was a very happy release and they welcomed the opportunity. Small wonder that often the slaves got desperate and mutinied, although in the great majority of cases of this sort the rising was unsuccessful and where they did succeed in seizing the ship it was all too often to find themselves absolutely unable to handle her and therefore she almost inevitably came to grief. The slave trade was the greatest blot on the history of the sea, and the fact that the great majority of our forefathers took it as a matter of course and saw no harm in it is a vivid illustration of the change in men's mentality.

CHAPTER XVI

The Eighteenth Century Explorers

Eighteenth Century Exploration.

After the halcyon days of exploration under the Tudors and the necessity of readjusting things after the troubled times that followed them, exploration in the eighteenth century was apt to be a little disappointing from the seaman's point of view, although some noteworthy voyages were carried out. It was essentially a period of consolidation and the improvement of trade, and there was very little new land to be discovered.

Halley's Voyage.

Edmund Halley, the astronomer and one of the foremost scientists of his time, is principally known for the comet named after him, but in August, 1698, he was commissioned as Captain of the *Paramour* to make observations on the subject of terrestrial magnetism and to complete the work that he had done twenty years before at St. Helena and other places in the service of the East India Company. This voyage lasted two years and took him down to 52 degrees South, the result being an immense increase in the knowledge of longitude and the variation of the compass. Another result of it was the construction of the first variation chart and a scheme for the discovery of longitude by occultations of six stars. Later he became the Secretary of the Royal Society and finally Astronomer Royal, dying at the good old age of eighty-six after rendering very signal service to seafarers.

Dampier's Australian Voyage.

William Dampier has already been mentioned as a none too reputable character, whose buccaneering was not far removed from piracy; but in 1699 he was rehabilitated and his genuine gifts as a navigator and surveyor recognised, by the command of H.M.S. *Roebuck*, in which he was sent out to discover the land round Australia. He struck the west coast and made the most careful survey of it, but failed to find any good harbour or promise of a good land for settlement. Unfortunately, he did not follow the coast further round, but went up to New Guinea, a large part of whose coast and surroundings he carefully surveyed and charted. He certainly would have done more had it not been for the mutinous spirit of his men, who compelled him to return by way of Batavia and the Cape of Good Hope. At Ascension in February, 1701,

his ship, which had been leaking like a basket for the greater part of the voyage, finally foundered, but the men contrived to struggle ashore until they were rescued and brought home by a passing East Indiaman. Dampier's account of the voyage did much good to geography, but unfortunately he was not employed in a similar capacity again and his remaining voyages were as a privateer with Woodes Rogers. He died in March, 1715.

The Hudson's Bay Territory.

In its early days the work of the Hudson's Bay Company was nearly as much exploratory as it was trading, and although in 1670 Prince Rupert had himself fitted out an expedition to map its territories, very little was done later, largely from a fear of interlopers breaking the company's monopoly in fur trading. Then one Mr. Knight, a man about eighty years old, was appointed Governor of the Nelson River, and tried to carry out an exploration of the waters adjacent to his territory with the *Albany* and *Discovery*, but he was unfortunate and the whole expedition perished in 1719. Three years later John Scroggs was sent out to search for him or his remains, and the report that he brought home caused people to place renewed faith in the belief that there was a North-West passage through Canada to the Pacific. Accordingly the Admiralty fitted out an expedition under Commander Christopher Middleton in the *Discovery* and *Furnace*, which did magnificent work but failed to find the promised passage. After him came a number of explorers, finishing up with Mackenzie in 1789, who gave his name to the mighty river whose mouth he discovered.

The North-West Passage Reward.

Interest in the discovery of the North-West Passage was reawakened in 1745, when an Act was passed offering a reward of £20,000 to anybody who should discover the north-west passage through Hudson Strait. A sum of £10,000 was raised to start an expedition, and two ships, the *Dobbs* and *California*, were bought and fitted out. The committee of the fund appointed Mr. Henry Ellis, who had already had considerable experience of this work, as its agent to go with the expedition, and it was he who made the scientific records, which are still regarded as being of very considerable value. After the return of the expedition no further attempt was made on the passage until during the 18th century, but in the meantime the Hudson Bay Company's servants, on their lawful occasions, added considerably to the knowledge of the north coast of Canada.

Whaling Discoverers.

The whaling industry also had been responsible for extensive discoveries, both by the English and the Dutch, especially round Spitsbergen and the waters to the north of it. In the early days of the 18th century the Dutch opened a whaling fishery in the Davis Strait and did very well there, but the exploratory work that they carried out was not as valuable as it had been in waters further east.

Roggeveen's Voyage.

In 1721 the Dutch West India Company sent Jacob Roggeveen into the Pacific on a voyage of exploration which expanded into a circumnavigation of the globe. He crossed the Pacific from East to West and in the course of his voyage he discovered Easter Island and apparently sighted the outlying groups of the Samoan Archipelago, although he did not pause to examine them carefully or possess himself of them, with the result that the greatest credit goes to his successors. He returned in 1722 after a voyage which considerably increased the world's knowledge of geography.

Antarctic Exploration.

The credit for being the first scientific Antarctic explorer belongs to a French naval officer named Pierre Bouvet, the father of the celebrated Admiral of that name. He set out in 1739 with the deliberate intention of discovering the South lands that had been hazily described in a book purporting to be written by the Sieur de Gonneville, but the results of his expedition were disappointing. He discovered Bouvet Island, it is true, in latitude $54^{\circ} 10'$ South, and contrived to work down to 55° South.

It was not until 1770 that a deliberate attempt was made to penetrate inside the Antarctic Circle. The credit for excellent work belongs to Yves Joseph Kerguelen, who sailed from France in 1771 with orders to search for the continent due south of Mauritius. The land that he found in 50° South he named South France; he believed it to be the centre of the continent, and when he found that it was only an island, he rechristened it the Isle of Revelation. It is now known as Kerguelen, after its discoverer, whose courage and pertinacity well deserved the honour. Cook's work is described later, but after he returned the only valuable discoveries made in the Antarctic were made more or less accidentally by whalers or sealers in the course of their work. All too little credit is given to these explorers by the general public, although their names are frequently perpetuated on the chart.

Russian Explorers.

When the Russians decided that their ancient territory was too small for their needs and pushed out towards the east, they carried on their work with remarkable tenacity until finally they came to the shores of the Pacific. That was a land discovery entirely, but when they got there they commenced a number of canoe and ship expeditions along the Pacific, and especially to the north. At the same time, two Russians in 1748 made a voyage from Archangel along the north coast until they reached the mouths of the Ob and Yenisei. Considering the interest that has recently been aroused in the Kara Sea trading expeditions, it is remarkable that this expedition should have contrived so much at such a very early date. Peter the Great was as enthusiastic on exploration as he was on shipbuilding, and not only sent out numerous purely Russian expeditions but also employed a number of Danes and British, including Bering, who in 1728 proved that there was water

between Asia and America. Bering himself did splendid work, both on this and other expeditions, finally being wrecked on the Aleutian Islands and dying there of scurvy in 1741.

Phipps's Expedition.

In the middle of the 18th century Arctic discovery aroused the greatest enthusiasm all over Europe, not only on account of the annexation of new land but also because of such scientific results as might be reached. For this purpose the British Admiralty sent out Captain J. C. Phipps in 1773 with His Majesty's ships *Racehorse* and *Carcass*. He did some useful work north of Spitsbergen, but did not find anything that he had hoped, and his work was not really appreciated until later.

John Byron.

Anson's voyage round the world has been already mentioned on account of its military importance, and cannot well be treated as a voyage of discovery. But in one of his ships which was wrecked, the *Wager*, was a midshipman named the Hon. John Byron. His account of the wreck is one of the finest sea books in literature. Between those days and 1754, when he was destined to take H.M.S. *Dolphin* on a voyage of discovery through the South Seas and to achieve considerable results, he had a long experience of naval warfare. He had extraordinarily bad luck in the matter of weather, so much so that he was always known in the fleet as "Foul Weather Jack," and his grandson, the poet, makes pointed reference to his ill-fortune in this respect.

Wallis and Carteret.

Hard on Byron's heels, Captain Samuel Wallis, R.N., took H.M.S. *Dolphin*, in company with H.M.S. *Swallow*, under Captain Philip Carteret, to complete his work. The ships were separated off Cape Horn, but Wallis discovered Tahiti in the summer of 1767 and returned to England the next year. His consort discovered the Charlotte Islands, the Gloucester Islands, Pitcairn Island, sailed through the straits separating New Britain from New Ireland, and carried out very valuable surveying work among many of the groups that had been already discovered but very imperfectly charted.

Bougainville.

Meanwhile the maritime powers on the Continent had also been carrying out exploration work, perhaps the most noteworthy of their navigators being Louis Antoine de Bougainville. His father intended him for the law, but he soon tired of that and became a musketeer. He contrived to mix his military duties, however, with scientific writing which attracted a good deal of attention, and at the end of the Seven Years' War, when the French authorities decided to establish a colony in the Falkland Islands, he was so enthusiastic that he undertook to carry it out at his own expense. Naturally, the Spaniards viewed the settlement with distrust and the utmost jealousy, and in order to avoid offending them the French abandoned the scheme, making the stipulation, however, that Bougainville should be indemnified for the expense



(Macpherson Collection)

THE DESTRUCTION OF THE "SANTA CATALINA," 1782.

Specially detailed to look out for the British frigate "Success," under Captain Charles Pole, the Spanish "Santa Catalina" found her in company with H.M.S. "Vernon," and by the time she had been forced to strike she was so badly damaged that Captain Pole decided to burn her on the approach of what he supposed



(Macpherson Collection)

THE TAKING OF THE "MARQUESE D'ANTIN" AND "LOUIS ERASME" BY THE PRIVATEERS "PRINCE FREDERICK" AND "DUKE," 1745

These privateers were among the best known of those commissioned by the British and had a number of noteworthy captures to their credit



(Macpherson Collection)

HANGING A PIRATE AT WAPPING

The object in the hand of the horseman on the left is supposed to be the Silver Oar of Admiralty which is hung in the Admiralty Court to-day. The Chaplain was also the special correspondent of the broadsheets that were then so popular after an execution and was in great demand to write the last words of the condemned wretch.



(Macpherson Collection)

SHIPS SAILING THROUGH THE ICE IN SEARCH OF WHALES, c. 1760

Although no British ship in the middle of the eighteenth century was comfortable, none were so hard as the whalers, yet they seldom lacked volunteers.

that he had undertaken. At the same time they gave him command of a frigate, and after he had handed over the Falklands to the Spanish he had orders to sail on a voyage of discovery round the world. He reached Tahiti only a few months after Wallis, and then carried out some valuable surveying work among the islands. That was the only voyage of exploration that he carried out, although in the last days of the Bourbon monarchy he projected a Polar expedition. When he died, in 1811, loaded with honours by his compatriots and his emperor, he left a record of achievement that would be hard to beat in its variety.

Captain Cook.

James Cook was a Yorkshireman born in 1728, the son of a farm bailiff, who tried to apprentice him to a haberdasher. The sea called him, however, and his father bowed to the inevitable and bound him apprentice to a firm of Grimsby shipowners, with whom he served in the Norwegian and coal trades. Having learnt his trade in this, he transferred to the Royal Navy as a navigator—not then a commissioned officer—and having impressed his superiors, he was appointed master to several small craft, which gave him ample opportunity of distinguishing himself. When Quebec was taken he was employed in surveying the river, and did a lot of similar work along the coast of Canada and Newfoundland after the war. His ability in this increased his reputation, so that in 1768 he was employed to conduct an expedition to observe the transit of Venus from Tahiti. For this he was commissioned as a lieutenant, and, having completed the work, he took his ship, the *Endeavour*, in search of the rumoured huge continent in the South Pacific. He thoroughly examined the islands of New Zealand, but was prevented from exploring them ashore by the hostility of the natives. He then went on to Australia, or New Holland as it was then called, and surveyed the whole of the east coast with the greatest care. He gave New South Wales its name, and also most of the prominent features of the coast, but he missed Sydney Harbour, which he regarded as a small inlet only.

Cook's Second Voyage.

Captain Cook's phenomenal success in his first voyage of exploration caused him to be given the command of an expedition which was fitted out almost immediately after his return. It consisted of the *Resolution* and *Adventure*, and sailed from Plymouth in the summer of 1772. He reached New Zealand in safety, and recommenced his search for the South Pacific continent, losing his way among the ice, and finally proving that no such great body of land as was rumoured could possibly exist. He then traced Easter Island correctly on the chart and gave a full description of its extraordinary statues, completely surveyed a number of other islands, and then discovered New Caledonia, Norfolk Island and several other lands of varying size and importance. Crossing to Tierra del Fuego, which he surveyed, he rediscovered South Georgia, and then traversed the South Atlantic to the Cape of Good Hope, disposing of the story of an unknown continent in these waters

as well. The advantages accruing from the expedition were colossal, not the least being that by the use of lime-juice he had conquered scurvy and had lost only one man out of a crew of well over a hundred in a voyage of nearly three years. On his return he was promoted to the rank of post-captain, which was a most unusual honour in those days for a man who had entered the Navy through the hawse-pipe.

Cook's Last Voyage.

Cook's discoveries had whetted the appetite of the authorities for more, and he was obviously the man to be entrusted with the command of any expedition. He was therefore sent out by the Government to settle the question of the North-West Passage, as he had settled that of the Southern Continent. He was ordered to attempt to reach it through the Pacific, while other ships attempted to get through from the Atlantic. His ships on this occasion were the *Resolution* and the *Discovery*, and reaching the Pacific by way of the Cape of Good Hope, Tasmania, New Zealand and the Society Islands, he charted a number of islets in the Cook Archipelago, and finally rediscovered the Sandwich Islands or Hawaii, which had been found by the Spaniards but whose existence was kept the closest secret by them. He then reached the mainland and worked steadily up the American coast until his passage was barred by solid ice extending indefinitely. This barrier was really the south-west coast of Alaska, but in the meantime he had explored numerous important inlets in the hope that they would lead him through the continent. He then worked his way back, perfecting his surveys, to the Hawaiian islands, which he christened after his patron, Lord Sandwich, then First Lord of the Admiralty. On the 13th of February, 1779, he was killed by the natives, in attempting to detect the men who had stolen one of his boats. It was a tragic accident for which the natives were genuinely sorry, but by it the sea lost one of its finest and most outstanding characters. In addition to his brilliant exploring work he had the distinction of contriving to make and keep happy ships wherever he went, a thing that was not by any means usual in those days. While he was alive he was often treated very poorly by the Admiralty, but after his death they were willing enough to shower honours on his memory.

CHAPTER XVII

The Expansion of Trade

Eighteenth-Century Trade.

The period between the years 1697 and 1783 was a very important one from the point of view of trade, a period perhaps excelled only by the nineteenth century. Admittedly it had not the glamour that surrounds the pioneer days of the Tudors and early Stuarts, and on that account is apt to be overlooked by many, but this era of consolidation and steady development was of infinitely greater importance from the national and economic point of view. The vitality of trade during this period is shown by the fact that the constantly recurring wars did not kill it and indeed scarcely sufficed to check it.

The Board of Trade.

The Board of Trade was originally founded under Charles II in 1668, but only became a permanent establishment with definite duties in 1696, when it consisted of the Royal Commission for Inspecting and Improving the Plantations in America and Elsewhere, with appropriate staff for the detail work. It had been discovered that the Board could do very much better work than this, and it materially benefited the whole trade of the United Kingdom to the East as well as to the West. When a Secretary of State was appointed for the Colonies in 1786, its duties with regard to the plantations rapidly disappeared and were replaced by the work of publishing statistical returns concerning trade. Eventually it assumed the regulation of all trade and shipping matters.

The Effect of the Navigation Acts.

The passing of the various Navigation Acts has already been mentioned, but their effects come very prominently into the history of trade during the period under review. In cases such as these history cannot always be regarded from the light of modern experience and dogma, for although the Acts were undoubtedly quite contrary to what is considered advisable in the 20th century, they certainly helped to build up a British merchant marine and a trade to the Colonies. It must be remembered that they had their principal effect when the country was not really capable of standing on its own feet in the matter of trade, but had become accustomed to relying upon mercenary carriers as well

as mercenary fighters at sea. The Navigation Acts put these matters to rights, and in so doing probably wrought more good than could have been achieved by any other means. But against this it must be admitted that when they were repealed in the 19th century their end was long overdue.

Scotland.

Before the two crowns were amalgamated, the trade with Scotland had always worked under a very considerable handicap, and the commercial intercourse between the sister kingdoms was surprisingly small. Jealousy was perhaps at the root of it all, and when one made a foreign alliance it was generally to the detriment of the other. The union of the two crowns made a huge difference to Scottish trade, principally by opening to her energetic seamen the opportunities of the British colonial possessions. They were not slow to reap full advantage of their chances, commencing with the West India trade, which is still to be seen in the sugar industry of Clydeside, and continuing to the mainland of North America, Canada and Africa.

The Darien Scheme.

The manner in which England was going ahead in the matter of commerce excited a good deal of jealousy in Scotland, and accordingly when William Paterson the economist suggested the Scottish colonisation of the Isthmus of Darien the project was enthusiastically accepted and the whole country was drained to start the expedition. It sailed from Leith in July, 1698, and duly arrived at Darien, nearly 1,200 settlers in all. They chose a well defended spot with good water and every prospect of prosperity. The colony was called New Caledonia, but their Dutch, French and English neighbours all looked on them with disfavour, and disease and internal dissension, coupled with the fact that their provisions had run out, reduced their numbers and soon the few that were left were glad enough to attempt to escape in three small vessels. Meanwhile two more expeditions had left Scotland, six vessels in all, but they were so badly managed and victualled that their people arrived weakened with disease and ill able to defend themselves against a Spanish force which they learned was collecting to attack them. Captain Alexander Campbell, one of the shipmasters who had come out with them, determined that offence was the best defence and accordingly collected two hundred men capable of fighting and, marching across the Isthmus, dispersed a Spanish army some seven or eight times his number. Meanwhile the Spanish fleet had arrived and when he returned to his own headquarters he found the situation hopeless and was lucky to be able to make his escape with a small party. The majority of the settlers were simply wiped out.

The South Sea Bubble.

In the first quarter of the 18th century public attention, and especially commercial attention, was fixed carefully on the South Seas, which were the El Dorado of the age. The idea is generally supposed

to have originated with Daniel Defoe the novelist, and it ended in 1711 by the South Sea Company being formed to take over £10,000,000 of the National Debt in return for a monopoly to trade in South America and the South Seas, and receiving at the same time the Spanish concession to take African slaves to the Spanish colonies under the provisions of the Treaty of Utrecht. It was anticipated that its profits would be colossal and immediately an extraordinary wave of speculation spread over the country. Bubble companies started everywhere, and political feeling came in strongly so that the Bank of England did everything that it could to wreck the South Sea Company and its offshoots. In 1718 war broke out and would appear to have destroyed its chances of profit entirely, but it continued to prosper for the time and the King became its Governor. It had done well enough till then to prompt its sponsors to more ambitious schemes, and accordingly it was suggested to take over the whole of the National Debt and to pay £3,000,500 for it. The company hoped that the pensioners of the Government would take up South Sea stock in exchange for their claims, that stock then standing at a very big premium. Then the Bank of England stepped in with a higher bid and eventually instead of £3,000,500 the company had to pay over £7,500,000. On top of this handicap came the financial panic in France, but the company pursued its schemes and the stock steadily rose. The crash came through the scores of other companies that had grown up in imitation of the main scheme. There never had been such a commercial collapse in the history of the country, and naturally scapegoats had to be found, both political and otherwise. This, however, was not the end of the company, as often supposed; its concessions were still valuable and the last remnants of the scheme lasted until the 'fifties of the 19th century.

Early Marine Insurance.

The beginning of marine insurance is wrapped in mystery, but it was certainly practised in a fully organised condition at the heyday of the Hanseatic League, and the practice of general average, or the payment by all parties for goods sacrificed for the benefit of the whole, was certainly in existence in the middle of the 16th century. In 1601 it was regulated on remarkably modern lines by an Act of Queen Elizabeth, the preamble of which stated that it had been practised from time immemorial amongst merchants both of this realm and of other nations. The early insurance policies show that the underwriters established themselves wherever it suited them and the broker had to find them; but, like most industries, they soon began to find their way into convenient centres, with the result that marine insurance in London collected round one coffee house.

The Beginning of Lloyd's.

Edward Lloyd's coffee house was first mentioned in Tower Street, London, in February, 1688, and at that time it was obviously the popular meeting place for merchants and shippers for the conduct of all their business. Ships and merchandise were sold there and enquiries made,

so that it was only natural that it should become the rendezvous for the insurance market. In 1692 it was moved to Lombard Street, then the chief business thoroughfare in London, and here the business was greatly enlarged and "Lloyd's News" established. This venture did not last very long on account of a political slight which the party in power professed to find in its columns, but soon afterwards it was revived as Lloyd's List, which exists to-day and is indispensable to everybody connected with shipping. The early files of this paper contain fascinating items of shipping history, and it is obvious that at quite an early date efforts were made to collect intelligence which would be useful to ship-owners and insurance men. Frequently this led to Lloyd's hearing of British victories or important events abroad before even the Government, and they were on more than one occasion thanked for passing on the information.

The Public Marine Insurance Office.

In 1716 a suggestion was made that marine insurance should be made a public concern and a project incorporated with a capital of one or two millions. The project was revived in 1718, at the height of the South Sea excitement, when it was declared that there was not sufficient private energy or capital to carry on the business of marine insurance and that it should be properly incorporated under the wing of the Government. Naturally the existing underwriters pointed out that the creation of such a monopoly would lead to delay or even absolute refusal to insure ships at critical moments, while the underwriters of London, who were already loosely connected by the bonds of their meeting place, were sufficiently independent of one another to maintain the business in any circumstances. After exhaustive enquiries into the subject the authorities were inclined to accept this view. In June, 1720, however, the London Assurance Corporation and the Royal Exchange Assurance Corporation were duly chartered under Royal favour and with powerful backing. The fact that the noble backers of these companies were willing to pay £600,000 towards the Civil List may have had a good deal to do with the granting of the charters. By these the two companies were given the monopoly of marine insurance apart from private underwriters. No sooner were the charters granted than the companies found themselves unable to pay the large sum towards the Civil List that they had promised, principally on account of the panic caused by the bursting of the South Sea Bubble, and there was a lot of trouble on this score.

The Survey and Register of Ships.

The Survey and Register of Ships, which is at present undertaken by Lloyd's Register of Shipping, an organisation quite apart from the Corporation of Lloyd's, was originally undertaken by private interests connected with the insurance world. In the middle of the 18th century it was recorded that "George Hayley, the first underwriter of this policy, and among other persons by whom policies of insurance are underwritten, keep a register in which all ships usually insured by them are entered, with an account of the age, construction and visible good-

ness of the vessels and to whom they belong; that they also employ a surveyor, whose business it is to survey such ships, and the ship in question, at the time of the underwriting of the policy, and long before, had been entered in such register, and previous to her last outward bound voyage had been surveyed by one Thomas Whitewood, who was then employed by the said George Hayley and other writers as such surveyor." As a result of this report the insurance of the ship was bound to depend upon the surveys made by the underwriters.

The Reorganisation of Lloyd's.

It was when the growing business of shipping and marine insurance rendered it necessary to collect the various interests in one convenient spot that Mr. Julius Angerstein, a prosperous merchant and one of the most prominent figures in the coffee house, though now remembered chiefly as the originator of the National Gallery, was asked to take the lead. He was born in St. Petersburg in 1735, and was thus still quite a young man when he succeeded in thoroughly organising the corporation of Lloyd's and finding it the premises in the Royal Exchange, which it is only now preparing to vacate. Many other people had previously tried and had failed to perform anything which could be described as permanent. Before he achieved this, Lloyd's had moved from Lombard Street and had occupied various temporary premises, finally securing their quarters in the north-west corner of the Royal Exchange in 1773, at what now appears to be the exceedingly moderate rent of £180 a year. From that date the corporation has never looked back; its activities are now world-wide and cover very much more than the original narrow field of marine insurance.

The Monopoly of the East India Company.

In 1693 a new charter was granted to the East India Company, giving them added protection against interlopers of all nations, British as well as foreign, but immediately afterwards the "New East India Company" was permitted to be formed in return for a loan of two million pounds. In 1708 the two companies amalgamated and increased their capital, but although this permitted them to put up a fund against their foreign competitors, it must be admitted that the strongly protective policy was not a wise one and that all sorts of abuses grew up under it.

The Hire of East Indiamen.

The method of chartering tonnage to the East India Company was peculiar, for since its earliest days the Company had owned very little tonnage of its own, but had relied for its supply upon outside sources. These outside sources were frequently the individual directors of the company, and this system naturally led to many abuses. As the supply of ships big and strong enough for the purposes of the trade was strictly limited, those who could provide them could ask for any price they liked, especially when they were directors of the company. The age was corrupt all round and everybody was trying to fleece his neighbour with tolerably good effect. In 1708 a by-law was passed to prevent

directors from having any interest in the ships that were hired by the company, and all tonnage was to be chartered by open tender. The shipowners were described as ship's husbands, and until prohibited by this same by-law they had been in the habit of selling the position of captain, and had often got as much as £10,000 for it. The captain, being allowed certain very valuable privileges by the company, soon got this sum back and a good deal more in addition, and after a time the post became a sort of freehold which the captain could either sell when he retired or leave to his heirs, who might not be capable of navigating a ship. In addition to generous pay and entertaining allowance, he was allowed to export 50 tons of his own goods without charge, only certain commodities being prohibited by the company. Homeward bound he had 20 tons, but on the goods that he carried he had to pay certain dues to his employers. However, as freight to or from India ran to about £25 a ton, he could well afford these charges. In addition, he was allowed to let his own quarters to passengers and pocket the fares, so that very often he would make £10,000 and even more on a single voyage.

These figures make the position of captain of an East Indiaman sound a very tempting one, but after a time the company made certain conditions before granting the command. A man must have made three voyages to the East, one as fifth or sixth mate, one as third or fourth, and one as second or chief, so that he would have had a certain amount of sea experience, although he might be in no way fitted to command a ship.

Fares to the East.

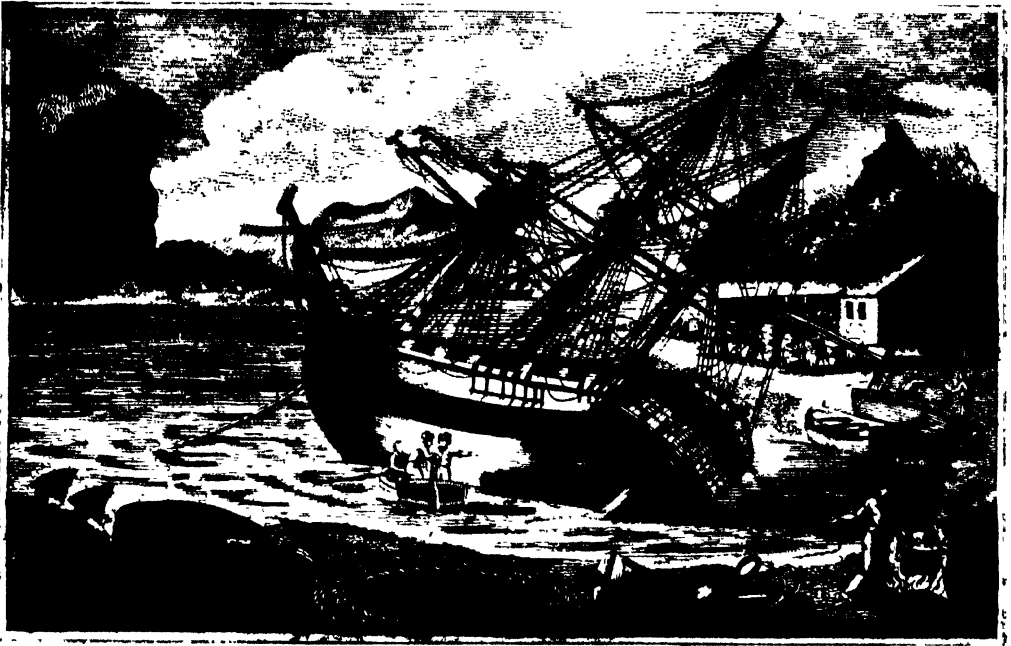
Fares to the East were strictly graded by the regulations of the company, whose guiding principle seemed to be the rank of the traveller. Thus, a subaltern in the Company's service had to pay nearly £100, while a general paid £235. This fare included a vast amount of baggage, but the traveller was forced to furnish his cabin and provide his own bedding and comforts. As to how long the voyage would take, nobody knew and least of all the company.

The Crews of the East Indiamen.

Although the Indiamen were probably manned better than any other ships sailing out of British ports, excluding always the slavers and the privateers, they had constant difficulty in the matter of their men. To begin with, there was the fact that there were so few skilled seamen in the country, then there was the fact that the Press Gang was invariably active and robbed them of all their best men; and finally the loss by sickness was colossal. Many of the desertions in Indian ports were made up with deserters from the company's army, who had to learn their trade at sea on the way home, just as so many of the seamen of the day had to learn theirs on the way out. In spite of the standing of the company the proportion of East India seamen who were "shanghaied" and shipped on board the company's ships while drugged was very considerable.

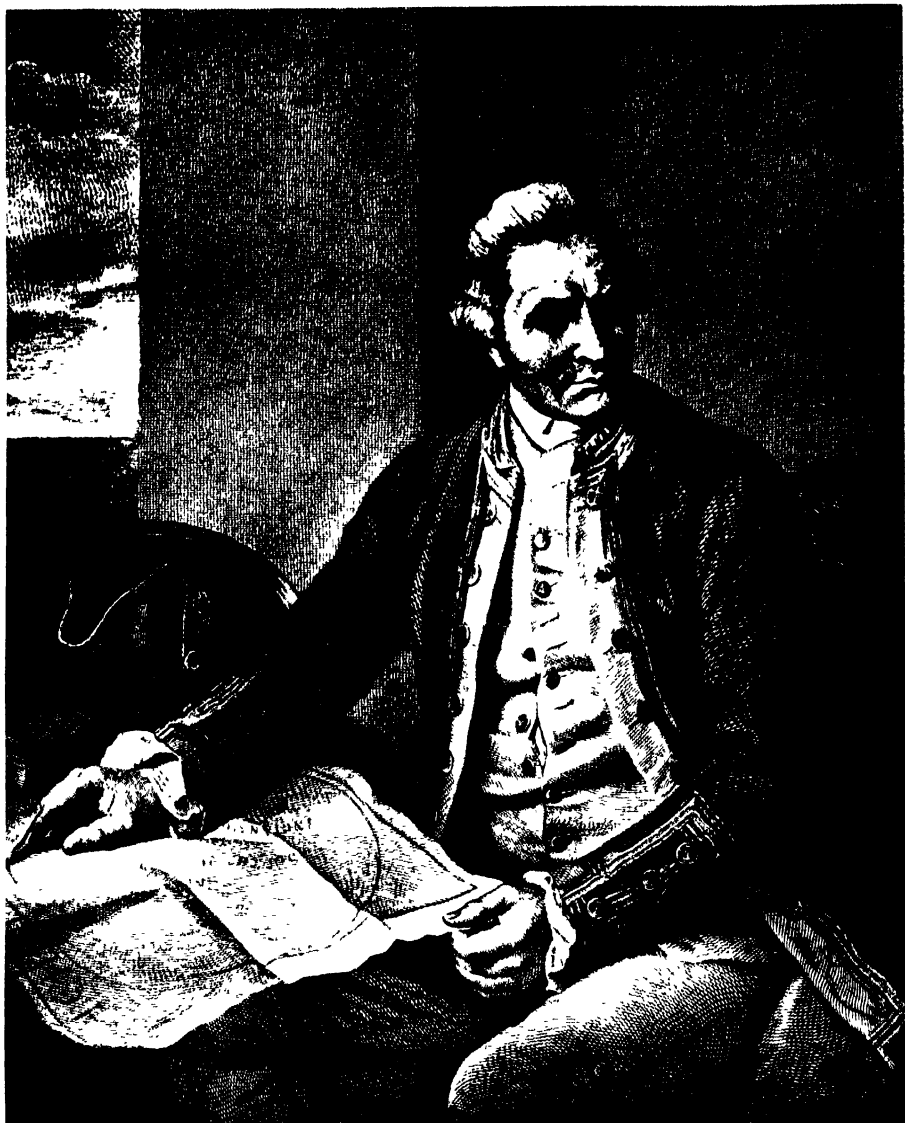


CAPT. CARTERET TAKING POSSESSION OF ENGLISH COVE



REPAIRING OF CAPT. COOK'S SHIP IN ENDEAVOUR RIVER

Underwater repairs and the necessity of keeping a ship's bottom clean were two of the greatest handicaps of the early explorers.



(Macpherson Collection)

CAPTAIN JAMES COOK, 1728-1779
ENGRAVING BY SHERWIN, AFTER N. DANCE

One of the most gifted navigators and indefatigable workers at sea, Captain Cook succeeded in attaining a high position at a date when promotion through the hawse pipe was exceedingly difficult.



(Macpherson Collection)

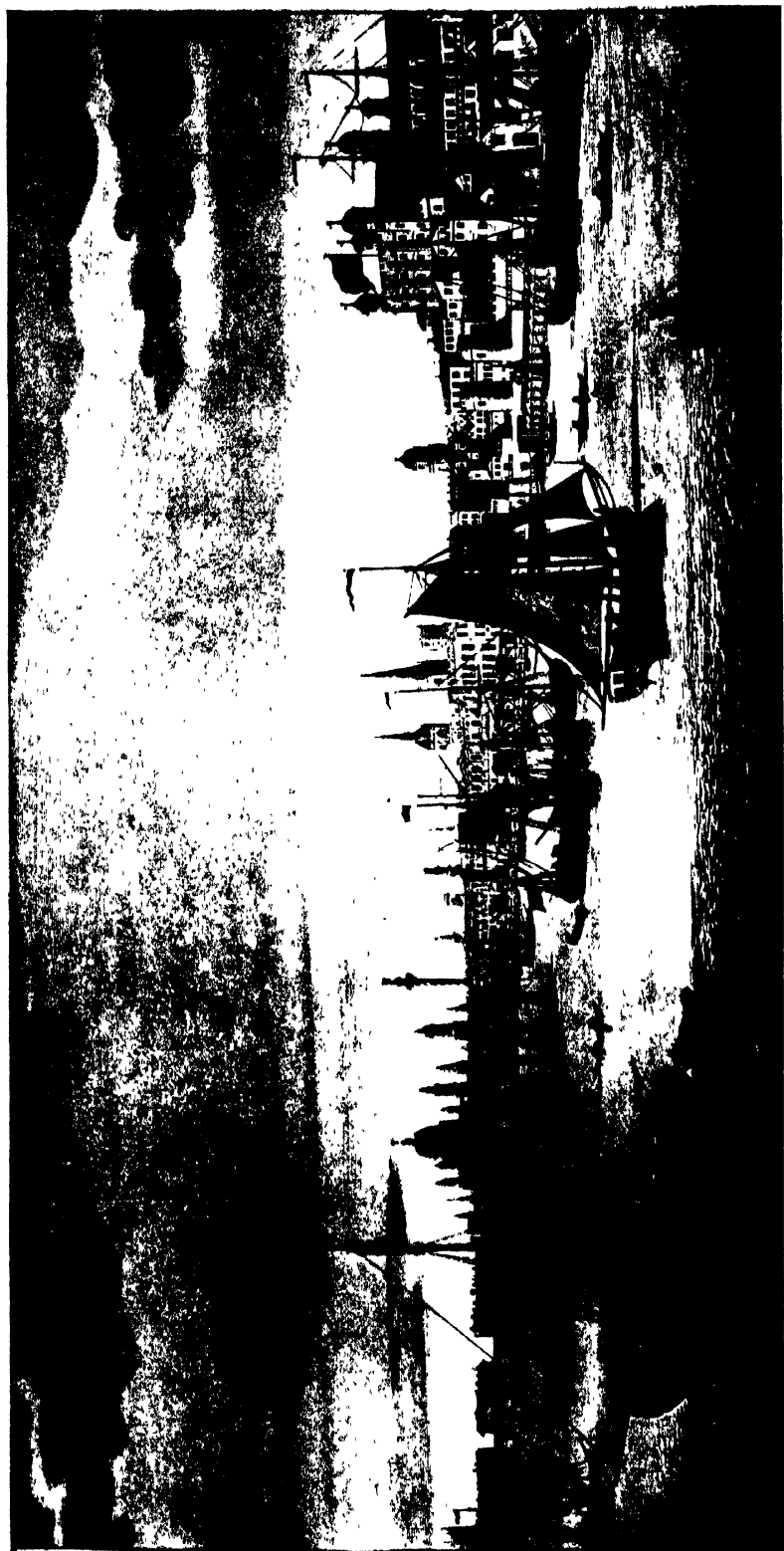
THE ARRIVAL OF THE "DISCOVERY" AND "RESOLUTION" IN KAMCHATKA, APRIL, 1779
(AQUATINT BY J. C. STADLER, AFTER J. ECKSTEIN)

Captain Cook obtained the results by sea that the Russians had contrived overland, the path of both parties being beset with the greatest difficulties.



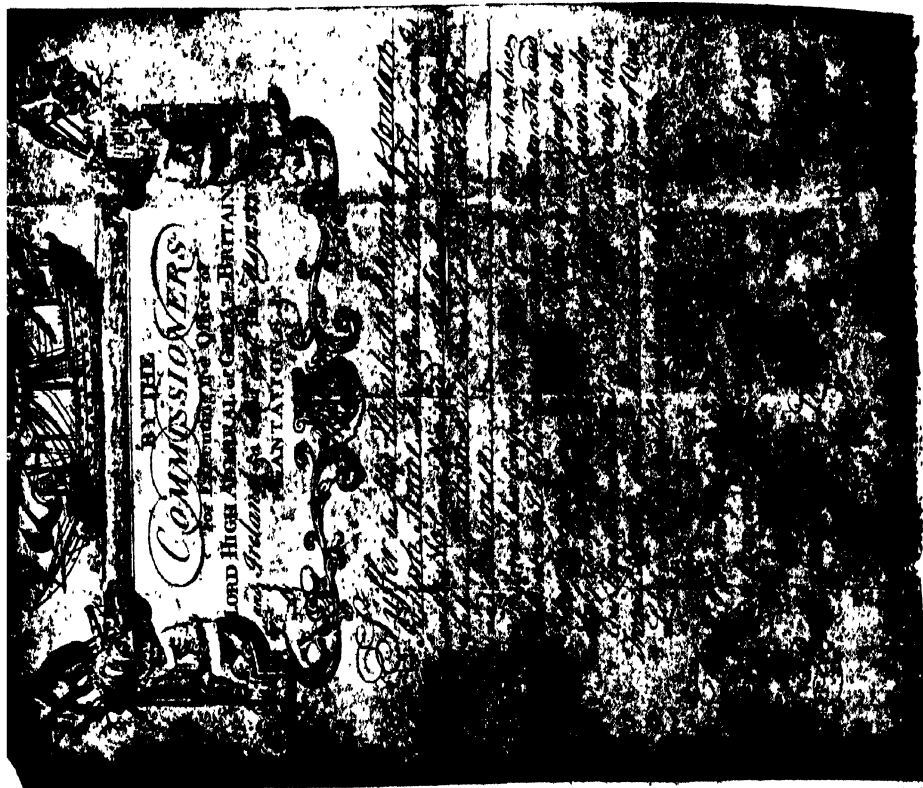
THE SOUTH SEA BUBBLE.
(ENGRAVING BY J. CARTER, AFTER E. M. WARD, R.A.)

The promises of the South Sea Company brought about a craze for speculation such as had never been known before. Every item of news that could possibly have an effect on the market price was eagerly accepted, and the most ridiculous statements were regarded as the straight road to fortune.



SOUTH-EAST VIEW OF LONDON
(ENGRAVING BY T. BOWLES, PUBLISHED 1746.)

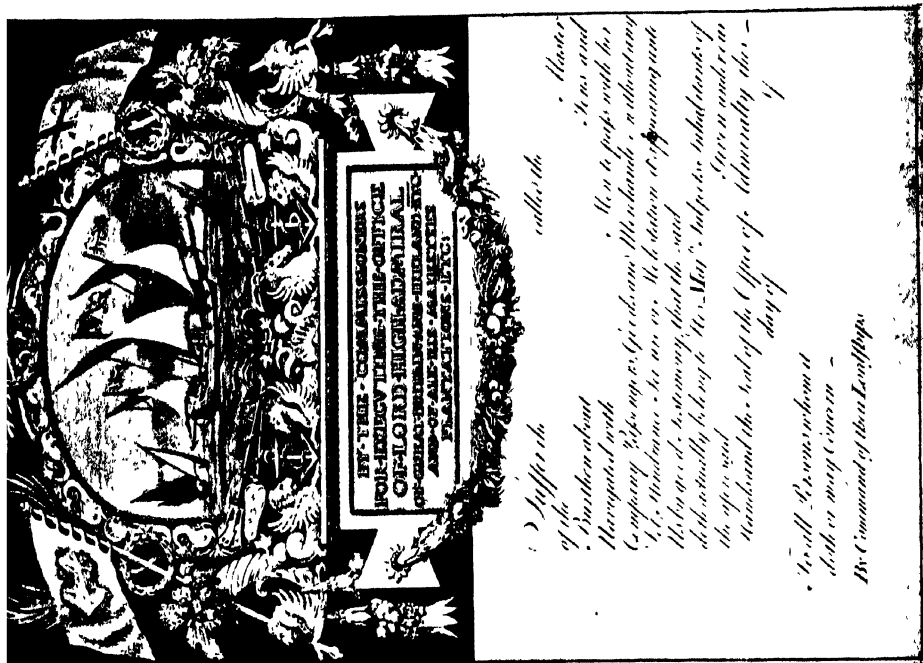
Old London Bridge with its narrow waterways effectively choking the river, the Pool below it was one of the busiest parts of the Thames in the middle of the eighteenth century. (From a print lent by Messrs. T. H. Parker.)

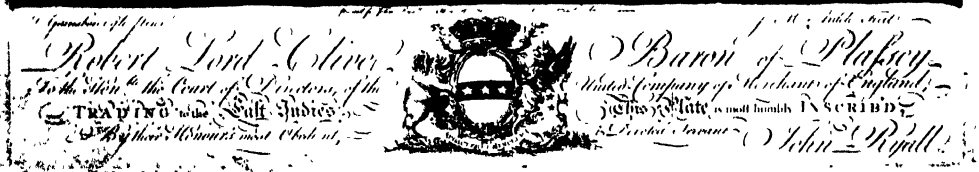


(Macpherson Collection)

ADMIRALTY PASSPORTS FOR MERCHANT VESSELS

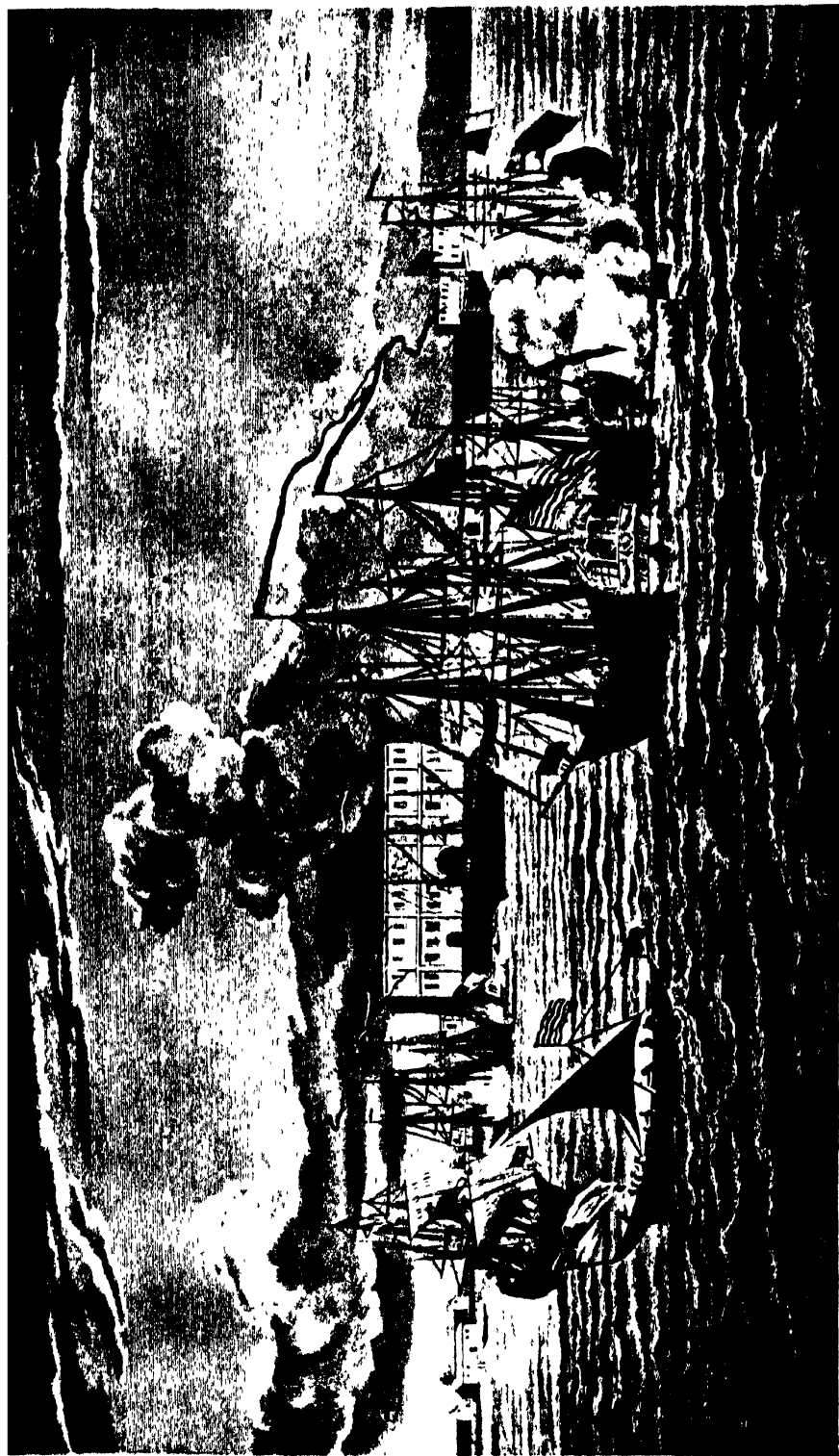
The signature Anson on the passport issued to the Elizabeth is of course that of the famous Lord Anson, who became First Lord of the Admiralty in that year.





LORD CLIVE
(MEZZOTINT BY J. MCARDILL, AFTER T. GAINSBOROUGH, R.A.)

By his great conquests and unlimited energy Clive greatly augmented the possibilities of the East India Company.
(From a print lent by Messrs. T. H. Parker.)



(Macpherson Collection)

BOMBAY, circa 1750
(ENGRAVING BY VAN DER GUCHT)

Bombay continued to be the most important trading post of the East India Company, where all sorts and conditions of ships could be seen collected.

The Finances of the East India Company.

As was perhaps natural with a somewhat loose corporation of individual interests, the finances of the East India Company were constantly the subject of discussion, and once or twice the subject grew into a big scandal. From the profits of the voyages that they were making one would have thought that all through the 18th century the company was in a very good position to pay the Government all that it had contracted to. But, instead of this, in 1772 they had to ask remission of their contributions, and at the same time for a loan of a million pounds. This was granted in the following year, but at the same time the India Acts were passed which put a stop to a large number of the scandalous leaks that were sapping the finances of the company. The East India fleet cost the company enough, but the waste at sea was as nothing to the waste on land, and by this Act the Government got an effectual say in the control of the company's affairs, especially where they concerned their territories in India.

The China Trade.

In 1773 the charter of the East India Company was reviewed and made to include the China trade as well as the Indian. The monopoly of such a growing trade was, needless to say, extremely valuable and, had it been run on economical lines, there is no doubt that it would have put them outside all financial care. Unfortunately their methods were so wasteful that it was estimated that they paid a good 50 per cent. more freight for each ton of cargo from China than they need have done. Even the increase in the size and efficiency of the East Indiamen that was brought in by the necessities of the China tea trade could not compensate for such a waste; but as each of the directors of the company appears to have been comfortably feathering his own nest and looking after his young relatives, it was not in anybody's interest to point out a better system. Collecting cargoes in China took some time, and it was the custom during the whole of the 18th century to unrig the Indiamen completely as soon as they got into Chinese waters and to make them ship-shape again when they had received their cargo and were ready to return to England. One of the most striking features about the East India trade at this time was the leisurely movements of the ships employed; time appeared to be the very last consideration worthy of notice.

The Tea Trade.

The first overseas importation of tea into England occurred in 1667, but it only weighed rather less than a hundredweight. In Queen Anne's reign tea had become very popular, although it was exceedingly expensive for, in addition to the original cost, there was a heavy customs duty to be paid. Tea, however, was a very favourite commodity with smugglers. The cheaper varieties were smuggled in from Holland, for the Dutch imported anything that could be described as tea, whereas the East Indiamen mostly confined themselves to the superior blends. The British East Indiamen themselves were not above smuggling, and it

was a constant complaint against the company that they did very little to stop the custom, which was universal throughout their service. The progress of an East Indiaman up channel at the end of a voyage was quite leisurely, and she frequently anchored for some time in the Downs, so that revenue cutters were told off to keep a very close eye on her because of the amount of dutiable goods dropped into the hovelling luggers that always swarmed round her. When one considers the conditions on board some of the early East Indiamen, it is a wonder that the tea arrived in anything like marketable condition, and it was indeed the profit to be made in this particular trade that caused the ships of the company to be built both faster and more seaworthy. By the middle of the 18th century huge quantities were being imported, but smuggling increased in proportion.

Foreign East India Companies.

The Dutch and French East India Companies have already been mentioned, but towards the end of the 18th century both were in pretty bad condition. The Dutch contrived to struggle on, but the French Company was wound up in 1790. The Danish East India Company, which was nearly as old as the British, was not doing well, while the Spanish Company, which had been specially founded in 1743 to trade with the Philippines, was existing principally on the strongly protective laws of the islands. The Emperor of Austria had founded the Austrian East India Company in 1723, but after flourishing for some time this also fell on evil days, and in 1785 failed for a huge amount. Only the English contrived to keep its head well above water, and even its prospects were often exceedingly gloomy.

The Convoy System.

All through the 18th century it was necessary to convoy British merchant ships because of the inroads made upon English commerce by their enemies, whether regularly commissioned men-of-war or privateers. Another reason for introducing the system was that the Navy made so many demands on the merchant service by means of the Press Gang that the best crew that a merchantman could hope for was a few first-class seamen, a crowd of foreigners, and a number of boy apprentices, who were not in the least deterred by the danger of going to sea but who were promptly pressed into the Navy as soon as they became experienced seamen. Such crews could not be expected to put up a spirited defence against foreign attacks, but at the same time it was not at all a convenient method of sailing, and if a ship was powerful enough to defend herself she took every step possible to get away from the convoy and sail at her own speed. It was in consequence of this that East Indiamen frequently took out letters of marque as privateers which were of the greatest assistance to them in beating off a French attack. Naturally enough, the progress of the convoy was very slow, for it frequently consisted of two or three hundred merchantmen or more, with a few warships to protect them. On some occasions as many as six hundred sailed at one time, but this was unusual. The task

of collecting the ships at a home port took some time, and the cost of this delay to the shipowner must certainly have been very considerable. But when eventually they sailed they were not free of the danger of having stragglers cut off from all the corners of the fleet. As a rule, the flagship was a heavy ship, a 74 or even a bigger line-of-battle ship, which took the lead, and was sufficiently heavily armed to beat off any attack that might be expected. A frigate brought up the rear and hurried along any stragglers that might leave the main body. On either flank there were brigs and sloops, but in spite of all these precautions it was quite general for a merchantman to get out of the fold, when she was promptly pounced on by an enemy corsair.

The Defence of Merchantmen.

Considering how many enemies they had at sea all ready to prey upon them, it is not surprising that all merchantmen in the early days went to sea armed. The system appears to have started in Roman times, when detachments of regular troops were ordered to sail in merchantmen, and continued right down into the middle of the 19th century. Generally the great trouble was the unreasonable desire of the shipowners to economise, and one cannot help thinking that the spread of marine insurance had a good deal to do with the number of badly armed ships that went to sea to fall an easy prey to pirates or privateers. Practically every ship carried some guns, but very often they were so worm-eaten that they were useless, and others were "Quakers," that is, dummy guns made of wood in the hope of scaring off possible enemies. When the Carron Company began to make their short, light guns they were very popular with merchant ships, and were first fitted in the ships owned by the company itself, which advertised in 1779 that one of their packets was sailing for London well provided with guns and men answerable for them. They also offered to take all trained soldiers and sailors, or steerage passengers who were used to arms and would undertake to help defend the ship, free of cost, as long as they fed themselves through the company's stewards at a very reasonable price. By this means their ships were generally able to give quite a good account of themselves if attacked by privateers, and with their letters of marque were able to sail without waiting for the regular slow convoy down the coast.

The Post Office Packet Service.

The original British government mail service ran from Harwich and Dover to the Continent, and was maintained by little ships of about 60 tons apiece, but at the end of the 17th century Falmouth was made a packet port for the new service that was being run to Spain with very much bigger ships, miniature sloops in type. Until that time Falmouth had been a very small village, but under the influence of the mail service it improved rapidly, and with the town the service also improved. The ships employed on the mail service had to be in the pink of condition and very fast, as a general rule trusting to their speed to save them from

enemy privateers and cruisers who were naturally particularly on the lookout for such prizes, and therefore quite a ship-repairing industry grew up around the station. The ships were hired from independent owners, but the personnel was that of the Post Office entirely and was supposed to be devoted to its interests, although, as a matter of fact, the men used to do a good deal of very profitable trading on their own, and occasionally of smuggling also. After the Spanish service came runs to the West Indies and numerous other quarters, until quite a fine and efficient mail-carrying service had been built up.

Defending the Mails.

With their well-built material and trained personnel the Post Office packets were not very far off men-of-war, and naturally the temptation was constantly to attack the King's enemies with the means at their disposal. This by no means agreed with the ideas of the Post Office, whose main object was to protect the mails at all costs, and therefore the packets were strictly forbidden to engage enemy ships. It was one thing to order a British seaman to fly at the approach of an enemy, but it was quite another to make him do it when he seemed to have a good chance of capturing his would-be captors, and accordingly the Post Office authorities struck on the idea of cutting down their armaments to such an extent that they would be an easy prey to the feeblest privateer unless they relied on their speed. There is no doubt that this system caused the regulations to be obeyed very much more than they would otherwise have been, but at the same time many packet commanders relied on the appearance of their ships, which could really be made to look very much like sloops of war, to bluff an enemy into a surrender. Every now and again, with their weak armaments, they bit off very much more than they could chew. However, some of the actions in which they engaged were unavoidable, and in spite of their feeble armaments many a packet ship contrived to put up a very gallant resistance, and on occasions to beat off her enemy.

The Russian Trade.

The beginning of the trade with Russia has been discussed in a former volume, but towards the end of the 17th century it had begun to attain a very great importance. When Peter the Great came to the throne he interested himself not only in the building of men-of-war but also in the development of his mercantile marine. At the same time the trade was thrown open by permission being granted to any person to enter the Russia Company on payment of a fee of £5, a sum quite within the means of most people who had indulged in a trading voyage. At the same time, there were considerable disadvantages in the trade, for Peter was a stickler for observing international agreements only when it suited his purpose, and he did not hesitate to seize trained seamen from any merchant ship which put into his ports, a procedure which frequently kept them tied up with their cargoes for long periods.

The Development of the Period.

The progress made in the 18th century was accomplished in the face of any number of obstacles. The design and construction of merchant ships were improving rapidly but they still left a good deal to be desired, even in the crack East Indiamen. The Press Gang was a necessity of the time, but there is no doubt that its methods of operation were a very severe handicap to trade. So were the methods of most shipowners, and one cannot be surprised that many good seamen were driven to piracy. But the British Empire was extending rapidly, new markets were being exploited, and new maritime powers were springing up around it, so that nothing could stop the steady expansion of overseas trade, while the rapid development of industry was giving full employment to the coastwise traffic.

CHAPTER XVIII

The Development of Ship Design

The State of the British Navy.

When the Treaty of Ryswick was signed in 1697 both the material and personnel of the Royal Navy were on a high level, but very largely by accident. The ships were still an adaptation of the Elizabethan men-of-war and the improvements that were to be brought about during the next century were as yet undreamed of, partly because of the essential conservatism of the people and partly because the shipwrights made their craft a great secret which was not to be divulged to any outsider, no matter what his position. This ill-advised secrecy all too often perpetuated mistakes, and it was not until several very expensive disasters had shown the public that all was not well that general interest and a greatly improved standard of professional attainment wrought the improvements that were so necessary. The 50-gun ships that were so popular in the days of the Commonwealth and the later Stuarts had lost much of their popularity and were beginning to be regarded as neither fish, flesh nor fowl, their duties in the line being handed over to more heavily armed ships and their duties as frigates to lighter and faster craft. In addition to more careful planning there was an all-round improvement in the professional attainment of the sea as well as the shore personnel.

The Genesis of Scientific Ship Design.

Naturally enough the deep secrecy maintained by the early shipwrights did not tend towards any improvement in design, each master preserving his secrets as a family tradition. The scientists of the Royal Society had certainly attempted to do something to improve the practice but they had done it so stolidly and heavily and what they did was so much at variance with all the experience of the practical men, that they were laughed out of court. A ship was built to the designs of the council of the Royal Society, which seems a curious procedure in these days, but she proved to be so top-heavy that she had to be sheathed with an extra thick skin of timber to improve her stability. So the rule-of-thumb men went on, maintaining that the only method of giving their ships increased speed was to give them increased lift, in spite of failure after failure and the obvious fact that the rapid increase in the size of

ships was proving designs on this principle to be very weak. Yet at the same time the French, naturally a scientific people, and more or less beginning to build their Navy, were working on purely scientific lines and the fact that the British always found it worth while to copy any French ships that fell into their hands taught the authorities that the new system could not be neglected. So gradually the rule-of-thumb men were displaced and first-class shipwrights substituted in their place.

The Improvement in the Underwater Body of Ships.

It was not until the latter part of the 18th century that real efforts were being made to improve the underwater body, and these were made in France. Curiously enough the most conspicuous figure was a churchman, the Abbé Bossuet, who lectured before the Academy and showed that water resistance was of the greatest importance. Hitherto everybody had paid sole attention to the bow of the ship, leaving the run aft to take care of itself, but the Abbé proved that this was of every bit as much importance to the speed of the ship as was the bow. Also it allowed the water to reach the rudder freely and assisted in her steering. He was enthusiastically backed by the navigational authorities of La Rochelle, although there were many in France as well as in England who considered that such methods were revolutionary and unnecessarily theoretical. It was at this time that comparative trials were carried out with models, a system that is scientifically practised to-day with the designs of every new ship. For many important discoveries M. Romme is to be credited. All this time in England the old tendency to keep the shipwright's art a close secret persisted and very little was published, although in practical matters British shipbuilders were still able to hold their own.

British Men-of-War.

The "establishment" of British men-of-war, which was founded in the early days of the 18th century, was allowed to continue well on into the middle of it, with the result that ships built to it were not at all satisfactory, and all sorts of trouble resulted from slipshod design and meaningless deviation from the original lines. At the same time, the weight of the innumerable extra features that were always working into a ship in war time caused many complaints of the weakness of British men-of-war, and to remedy this extra knees and beams of various kinds were fitted in for additional strength, often to the very great inconvenience of the men who had to fight the guns and work the ship. Things were improved after the peace of 1748, but at the end of the century Mr. Snodgrass, of the East India Company, who certainly knew more about ships than most people of his day, declared before a Commission that, in his opinion, practically all the ships in the Navy were too short for their purpose, and he suggested that in future they should be built longer in order to permit an extra timber between each two gunports and also that care should be taken to avoid overweighting the ends. Practically all the King's ships had their foremasts set too far forward; they were too lofty aft and too low in the waist, and he

declared that they would be much better and safer if the forecastle and quarter-deck were joined together, giving the flush-decked type that afterwards came so completely into favour. He believed that all knees should be of iron rather than wood, and that the fastenings and grapplings on the average man-of-war should be greatly increased. There was too much tumble-home to the sides for strength and seaworthiness, and also—a point in which he was at variance with many of the authorities of the time—he preferred fir or elm to oak, fir if it could conveniently be used. It was in good materials and conscientious work that he could find no fault with the ships of the Royal Navy. So much was this so that Spain invariably turned to British labour for the construction of her ships, nearly all the shipwrights in her dockyards (Havana being the conspicuous exception) being British-born, and many of them continuing their work even in war time.

The Development of the Frigate.

One of the directions in which the change in the principles of ship design was best shown was in the way that the frigate developed during the 18th century. Long before this it had been decided that something smaller than a line-of-battle ship and better than a pinnace was necessary for work with the fleet, and an effort was made to get a satisfactory small warship by reducing the design of a big one in every detail. The result was the numerous "Lion's Whelps" and it is not altogether surprising that they were not successful. Then they took the lines of a captured Dunkirk privateer and from them they evolved the *Constant Warwick*, which is often spoken of as the first frigate. By the beginning of the 18th century the progress of the science of naval warfare and the new principles which were being taught us by the French had forced the development of frigate design faster than anything else, and the British were beginning to get ships in the fleet which were more or less suitable for their work and made a big difference to the fortunes of the fleet. They were still far from perfect, however, and it was not until round about 1780 that the Navy got a really satisfactory frigate, and then not in anything like sufficient numbers.

Eighteenth-Century Galleys.

It has already been mentioned that galleys were never particularly popular in the British Navy, although they survived in the Mediterranean well on into the era of steam. Ships called galleys, however, appear in the Navy List and the records of the times. In fact, it came to be that a ship was frigate-built when she had poop and forecastle, and galley-built when she was flush-decked. These ships had oars as an auxiliary form of propulsion, just as any other small men-of-war did, but they were not the galleys proper. At the same time, the British Navy in the Mediterranean made considerable use of half-galleys, as they were called—vessels, 120 feet long, with a beam of 18 feet, propelled by forty oars and carrying five guns.



(Macpherson Collection)

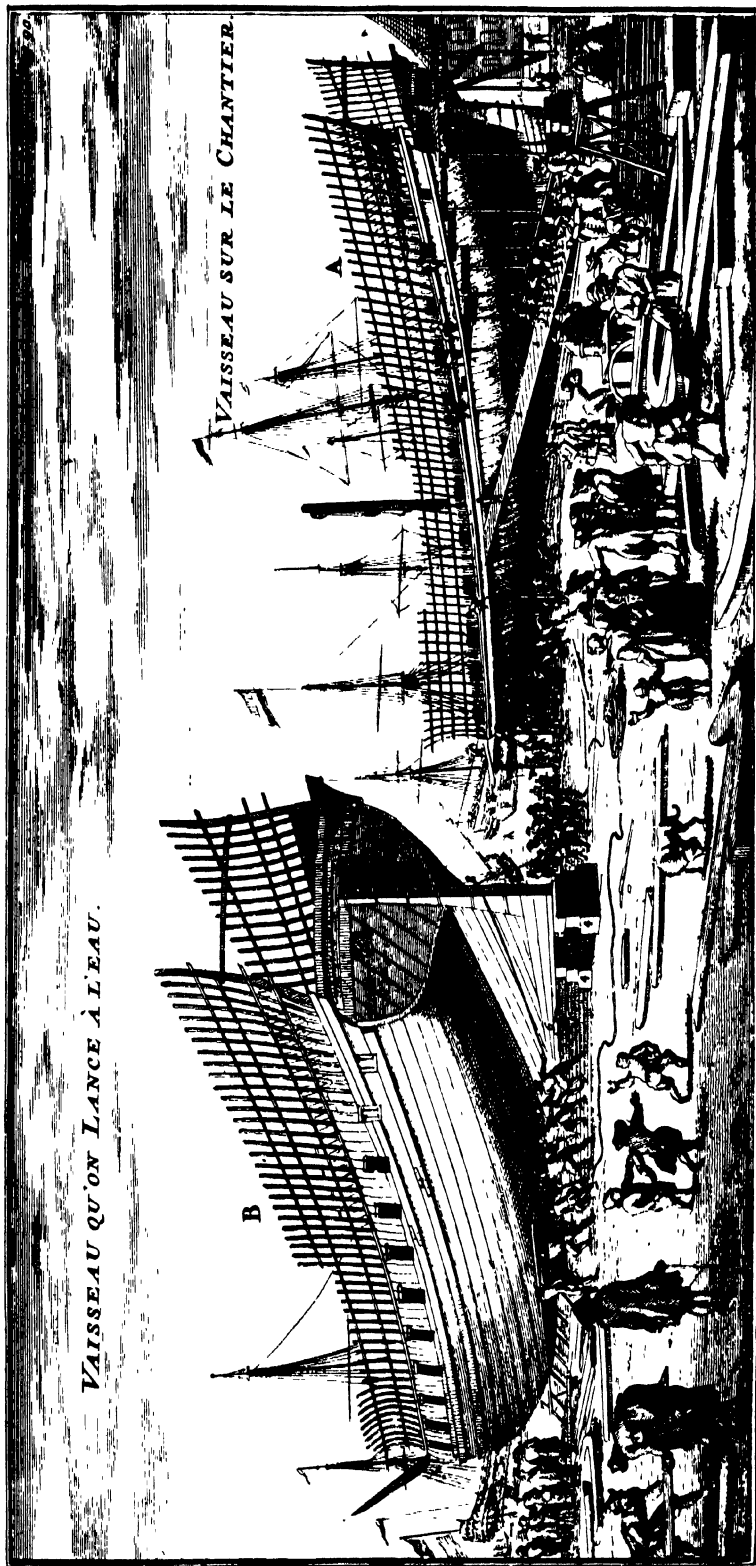
THE "SUFFOLK" AND OTHER EAST INDIAN SHIPS BEATING OFF FRENCH SHIPS OF WAR, 1757

In this action three of the East India Company's ships, the Suffolk, the Houghton and the Godolphin pluckily resisted an attack by the Illustre, 74 guns, and the Balaine, 36, which were successfully beaten off.



MODEL OF H.M.S. "MARLBOROUGH," 1708.

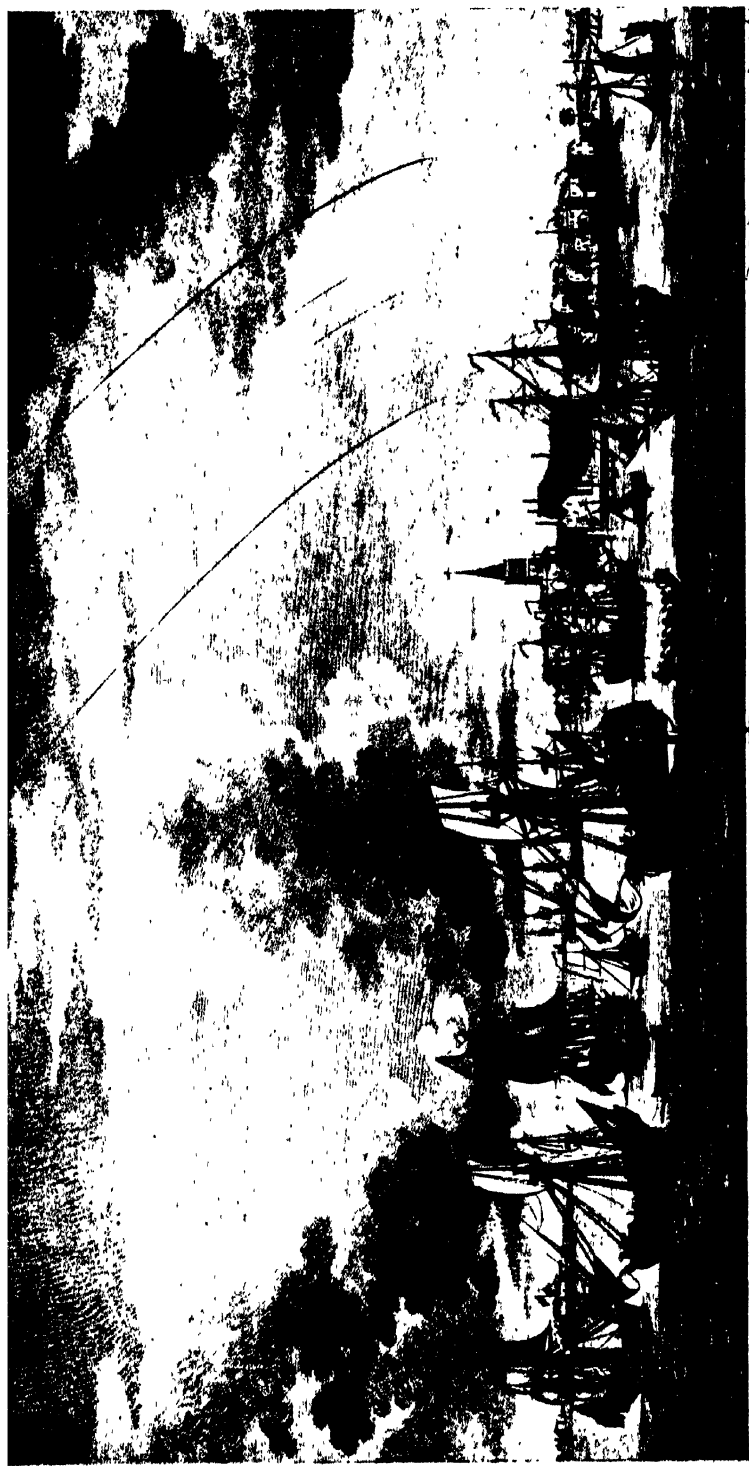
This model was for a long time in the London Museum on loan, it was removed in the early part of 1924, and is now in America, like many other fine models of England's old naval



SHIPBUILDING AND LAUNCHING IN HOLLAND
(FROM "L'ART DE BÂTIR DES VAISSEAUX," PUBLISHED AMSTERDAM, 1719)

(Macpherson Collection)

The eighteenth-century Dutch custom of building ships in any convenient open space is still to be seen in some parts of Holland. It will be noticed that the bluff bows of the Dutch ships permitted them to be launched bow foremost without the danger of diving.



(Macpherson Collection)

THE YATCH OR YACHT "MARY" AND OTHER VESSELS OFF HARWICH, 1727
(FROM AN ENGRAVING BY P. C. CANOT)

Although they were not so described, yachts existed in the Royal Navy from early days. In this engraving the terms "yacht," and "yacht" are both used in referring to the principal vessels assembled. The Mary, with the Duchess of Lancaster on board, is in the centre, and to the left is the Charlotte, with Lord Anson, and at the extreme left the Catherine, with the Duchess of Hamilton on board.

Eighteenth-Century French Ships.

It has already been mentioned in a previous chapter how Charles II and William III found it worth their while to copy French ships, and the same thing went on right through the 18th century. In the French service the greatest possible attention was paid to design, and the tendency was to increase dimensions without adding to their gun-fire. In England, on the other hand, the desire was always to keep dimensions limited and for this reason the "establishments" were worked out which had a very stifling effect on the minds of the designers. The French produced some magnificent designs, but generally speaking they were weak both in construction and material, although they built some very big ships. They made a big move ahead at the end of the century by abolishing the use of shingle as ballast in favour of iron, for shingle gave a high centre of gravity and moreover could not be dried, the dampness between decks which resulted from its use proving very injurious to the health of the crew. When the experiment with iron was made with the frigate *Iphigène* it was found that she was the best sea-boat and the fastest sailer in the fleet and that she could mount fifteen guns a side instead of the thirteen previously.

The Fresh Water Difficulty.

Nowadays the cruising capacity of a ship is limited by her fuel, but in the 18th century one of the principal ties was the fresh water difficulty, which had been an obstacle to long voyages from the earliest times. A ship attempted to stow all the fresh water that was required for her voyage, but many things might happen to waste her supply. Ships occasionally distilled their own fresh water, but very seldom, and it was not until 1772 that the Admiralty gave orders that all men-of-war should carry stills and appropriate apparatus. Even then only a small proportion of the water required could be so obtained and the water that was taken from port was so foul after it had been in the average ship's tank for a spell that it was a wonder that any of the men survived illness.

Bilge Water and Ventilation.

The bilges of all H.M. ships were unutterably foul at this time, and when finally some attention was paid to the problem of keeping them sweet it was far more for the sake of preserving the ships' timbers than out of consideration for the health of the men, which appears to have escaped all notice. The surveyors of the Navy discussed the matter at great length in 1710, when they devised all sorts of extra timbers which would facilitate the bilge water running down to the pumps, while the first idea of ventilating the lower spaces of a ship was to fix things in such a way that the rolling of the water naturally displaced the air and made some sort of a current. Nearly half a century afterwards a Dr. Hailes brought before the Admiralty a system of ventilation to counteract the foul air from the bilges, and this appears to have been the first occasion on which the health of the men was considered apart from the preservation of the ship. By means of windmills and large air pumps a good deal was done, but when one recalls incidents like the burying of

Admiral Hosier's body in the ballast of a man-of-war there was a lot left undone and the wonder is that the casualty lists were as small as they were. As showing the improvement effected by Dr. Hailes's method, the ships on the North American coast which were fitted with it only had one death to the twelve of those without it ; yet it was officially abolished towards the end of the 18th century.

Hemp Cables.

Although chain cables were known at the time of the Romans, one of the greatest handicaps in long distance cruising in the 17th and 18th, and even part of the 19th century, was due to the use of hemp cables. In a small man-of-war designed for long-distance cruising at least a quarter of her service space was occupied by cables, thus cutting down her supply of water and stores to a dangerous degree. Not only did they take up a lot of space, but hemp cables had to be constantly watched for chafing when in use, or for rotting when stowed away, so that really one cannot be surprised at the number of anchors and cables that were lost in any sort of bad weather and one can well understand the old sailormen's dread of a lee shore with such uncertain ground tackle.

Ship Timbers.

In the year 1694 the Navy Board carefully considered the question of ship timbers and continued to do so at intervals for the next twenty years. The ribs and planking of a ship were generally charred before they were used, the method being to set the timbers in front of a fire fed by waste wood, while their outsides were kept wet. By this means the plank or rib was finally bent to the required shape. Later the charring process was replaced by stoving, in which the wood was placed in wet sand and subjected to a strong heat which extracted the juices and allowed it to be bent. It was not until the middle of the 18th century that proper attention was paid to the seasoning of the timber for shipbuilding, the lesson having been learned by the rapidity with which some of our best ships decayed. It was then declared that big ships should remain in frame at least a year to season and that timber should be sawn at least a year before it was used and should be properly stacked so that air could circulate round it. British oak was considered by far the best timber for shipbuilding. Several foreign Navies, noticeably the Dutch, imported it for the construction of their ships, while others were forced to use fir, which splintered when it was hit by a shot and in this way generally caused more casualties than were directly due to the enemy's fire. This superiority of British timber was ascribed to the weather, the succession of warmth and cold, sunshine and rain, subscribing just what was required for alternate conservation and growth. It was none too plentiful, however, especially when timber was used for the smelting of iron for cannon, with the result that during the 18th century foreign oak was ordered to be used for repairs.

Sheathing.

From the very early days the question of protecting a ship's timber

from the ravages of worm was a very important one, and as early as the 15th century *Santa Anna* lead was experimented with. About the same time it became quite general to cover the underwater body with a sheathing of soft wood. Lead also was considered to be worthy of repeated trials and was quite general in Charles II's reign. The natural disadvantage was that the action of water tended to strip off the soft metal and that the jagged edges pulled up the ship's speed more than anything else. Experiments with copper were made in the year 1761, when a frigate on the West Indies station which had been sheathed with a thin plate of copper was sent on an experimental cruise. The 32-gun *Alarm* was the ship chosen and after a spell she was carefully examined in dry dock and found to have withstood the tests very well indeed. After some years, however, it was found that, where the copper was fastened with iron nails, excessive oxidisation had set up and the sheathing was practically ruined, a difficulty that is prevented to-day and has been for many years past by the use of dividing washers. A great advocate of copper sheathing was Admiral Rodney and it was due to his insistent demands for sheathed ships while he was in command in the West Indies that the custom became general. It was not, however, completely satisfactory until well into the 19th century.

Scientific Sails.

The development of the sail plan of ships from the elementary square sail of the earliest times down to the quite elaborate rig of the Tudors and Stuarts has been traced, but it was not until early in the 18th century that the rig of big ships attracted the attention that it deserved. Then triangular headsails came out, first in the Dutch, and later in the big British and French ships. They had been adopted in small Dutch sloops as early as the 16th century, but for big ships all nations had been content to have the square sprit sails and sprit topsails. At the same time the mizzen began to develop. It came from the Mediterranean in the shape of a lateen and was not adopted for big ships for many years. Then riggers did without the section of the sail before the mast, and finally gave the gaff jaws instead of hoisting it across the mast. This arrangement permitted a far better handling of the square sails on the mizzenmast, essential for keeping station in squadron or convoy.

Economical Shipbuilding.

In 1703 it was decided that the cost of building men-of-war was far too high and efforts were made to cut down every unnecessary expense. Strict orders were given that all elaborate ornamental work was to go, that carving should give way to moulding and that the panelled bulkheads were to be replaced by frames and painted canvas. In this way weight as well as money was saved, and the business of clearing the lower deck of a ship for action became much more simple.

Early Navigational Equipment.

When one considers the apparatus with which the navigators of old tried to find their way about the Seven Seas, one cannot help thinking

that the wonder is not so much that they were constantly off their course and made discoveries by accident when they were really trying to go in quite a different direction, but that they ever made a proper landfall at all. These navigators took the altitude of the Pole Star for the purpose of getting their latitude by means of an astrolabe, or sometimes even with a crossbow, and the noon altitude of the sun by similar means. As for longitude, it could only be found by dead reckoning, and generally their reckoning was surprisingly out. Even Anson, when he went round the world, wasted a lot of time groping for the island of Juan Fernandez and sailing up and down its parallel in the hope that he would strike it. The time thus wasted meant seventy or eighty deaths to his sickly ship's company. No wonder that the authorities were willing to offer a big reward for some method of finding a ship's longitude with even tolerable certainty. Many efforts were made to win this reward, but most of them were hopelessly unpractical. It was realised that the method must be to have an absolutely accurate time-piece, but such a thing was far beyond the powers of most men at that time; they might make a passable timekeeper on land but it would not stand the motion of a ship. Among the ideas put forward in hope of gaining this reward may be mentioned that of the man who suggested the erection of a sundial on the poop of each ship. However, through the 17th century the standard of timekeeping steadily improved, although it was never accurate enough for navigational purposes until Harrison came.

John Harrison's Chronometers.

The man who made the first really practical chronometer was the son of a Yorkshire carpenter, who worked for his father for some time before he turned his attention to horology. His first noteworthy clock was made in 1715 and is still to be seen at South Kensington, remarkable for its wooden wheels. By the time the Government in 1713 offered prizes of £10,000, £15,000 and £20,000 for a timekeeper which should be accurate enough to determine longitude within sixty, forty or thirty miles respectively, John Harrison had taken up the study of clocks seriously, and it is on this that his reputation rests. His first chronometer was completed in 1735 and weighed 72 lbs.; it was not accurate enough to win the prize but far in advance of anything that had preceded it. His second was completed in 1739 and only a few months ago was made to go and keep accurate time by Commander Gould, of the Hydrographic Department of the Admiralty, who has written the standard history of the marine chronometer. The third was an adaptation of this and took seventeen years to complete. His fourth chronometer that won the prize was shaped like a large watch, and after that he completed his work by making a fifth, which is now preserved at the Guildhall in London. His timepieces survived their tests and made a huge difference to navigation, permitting ships which could afford to carry one to find their way about the seas with tolerable certainty, and it was entirely owing to his invention that Captain Cook was able to carry out his famous voyage.

Naval Guns.

The general tendency was for the English guns to be short and of big calibre, the French to be smaller and longer. This was due to the British idea of getting alongside an enemy and hammering her into submission, while the French policy was to stand off and wreck the enemy's rigging sufficiently to prevent her following and stopping the particular operation which the French had in view at the time. For this reason the French gun often outranged the British by as much as a mile. Most continental naval observers considered that the British over-gunned their ships badly. When they took a French or a Spanish prize the first thing they did was to put heavier metal into her, while the first thing that the French or Spaniards did in similar circumstances was to land some of her artillery. Later the British were to learn that the Americans could mount heavier metal than anybody and still have a fast sailing ship. However, there were constant efforts made to overcome the bad lessons learned from the Dutch Wars, when gunfire was everything, and in 1716 and 1730 special orders were framed to cut down the metal of British ships and make them sail better, although these seem to have had but little good effect.

The Effect of Gunfire.

The disadvantage to long guns of small calibre was that when they hit the side of a ship they tended to go right through her while the softened wood closed round the hole, reducing the leak and making it quite easy for the ship's carpenters to repair it with plugs. Several patent plugs for this service were invented both by the authorities and by the carpenters and officers of the fleet. It was to get over this difficulty that the practice of double-shotting the guns came into vogue, for although both aim and range were spoiled, the hole caused by the double shot was invariably a serious one. This disadvantage of long guns in close range fighting, as well as the necessity of economising weight, led to the invention of the carronade.

The Establishment of Woolwich.

In the old days, when coal for smelting purposes was but little known and its use was being heartily opposed by the ironmasters, the casting of cannon came to be confined to the counties where wood was plentiful for the purpose. In 1619 a decree confined it to the counties of Kent and Sussex and the guns were to be handled at the Tower works only, but it is to be feared that a good deal of unauthorised gun running went on and artillery was sold even by the Royal establishments. Guns cast in the home counties were tested at Moorfields in London, which cannot have been a very comfortable neighbourhood for dwelling-houses, the site of the butts being roughly where Liverpool Street Station now stands. Meanwhile the use of bronze for gun casting in place of iron was growing, and presently it was decided to move the testing ground at Moorfields to Woolwich. But it was an accident that occurred in 1716, when an attempt was made to use some captured guns which had been on exhibition in the City for some years, that decided the authorities that a proper system of gun founding must be established and

accordingly the Royal Gun Factory came into existence. The first master founder was a foreigner, Andrew Schalk of Douai, and he held the position until he died in extreme old age sixty years after his appointment. The guns that he cast were completely successful and had a big influence on British successes in the wars that followed.

A Quaker Artillerist.

Curiously enough the man who made most difference to the science of British Naval gunnery was a Quaker, Benjamin Robins. His parents were in poor circumstances and were unable to give him very much of an education, but he had such mathematical genius that a friend advised him to go to London. He made a very close study of the science of gunnery and published the results in his book, "The New Principle of Gunnery," which came out in 1742 and made a great stir. His careful investigation of the resistance of air on the progress of projectiles was quite a new line of thought for the gunnery men of the period, and there was a tendency to laugh at him in England until the French realised what lay behind his work and endorsed it heartily. He also advocated the institution of rifled gun barrels, but that was not to come into general practice for a long time after his death. Finally his theories began to be generally accepted and the East India Company, whose armaments in the East were then in a very bad way, offered him a big salary to go out and superintend their fortifications and the armament of their ships. He went out, but before he could do anything constructive he died of fever in the year 1751.

Improved Gunnery.

At the same time a further great improvement was adopted by the invention of a method of boring guns, which permitted them to be cast solid and bored afterwards instead of having to be cast round a core as had previously been the case. At the same time a great improvement was effected in the methods of casting iron, with the result that higher pressures could be employed, and altogether gunnery was greatly improved in every particular. During the Seven Years' War it was seen that the field guns very quickly wore out and iron guns from the fleet were brought ashore, and at the same time the gun came to be regarded in a severely practical light. All the ornament that had decorated the early guns gave place to a simple initial of the name of the caster, with generally a date as well. Experiments were also carried out in making the chamber, in which the propellant was fired, spherical instead of cylindrical, but as a rule the violence of the recoil of these guns was too great for their use to be practical. It was not until some time after that real efforts were made to improve the carriages on which the guns were mounted, the recoil being treated in just the same way in George II's reign as it was in Elizabeth's. In 1779, however, an effort was made to improve them by easing the recoil of the guns with steel springs attached to the carriages. This eased the shock on the breaching rope, which had previously been so great that frequently the guns broke adrift and careening round the deck caused as many casualties as the enemy's shot before they could be secured.

About the same time other attempts were made to check the recoil by means of running the gun up an inclined plane, but none of them were particularly satisfactory. The same inventor devised a means whereby a far greater arc of fire could be secured by the ordinary broadside gun, with the result that a ship so fitted could come into action with the enemy long before any of the others and maintain it long after. It must be remembered, however, that the arc of fire through the ordinary gun-port was always very limited, and the deck guns were very seriously interfered with by the rigging of the ship.

Firing Appliances.

It was shortly before 1780 that a determined attempt was made to introduce a proper firing lock into the fleet instead of the slow match that had done duty ever since the invention of gunnery. The smaller pieces had been fired with locks for a long time past but the big guns had stuck to the old system, and there was a good deal of opposition to introducing either a firing lock or a fuse.

The Carronade.

As may well be imagined, the immense demand for guns both for shore service and for men-of-war and armed merchantmen during the French Wars caused a very serious shortage, which was to a great extent relieved by the invention of the carronade in 1778. This came from the Carron Company, one of the best known of the Scottish iron founding firms, who constructed a light gun very much like the old Cohorn. It was very much shorter and lighter than the ordinary naval gun of the period but fired a heavy shot, advantage being taken of the shortness of the weapon to reduce the "windage" which was usually allowed. Weight and space were the principal considerations in mounting big guns on an ordinary ship's deck, but this light gun with its specially designed carriage enabled them to fire a heavy shot which did colossal damage at short range although it had no effect at a distance. They were naturally much cheaper than the long guns, which was another great consideration in their favour with armed merchantmen who were among the principal advocates of the system. They also found their way into the Royal Navy in very considerable numbers, but they were rather curiously regarded and were not included in the ship's official armament, the figure being given as though these carronades did not exist. In short-range action, however, they made a huge difference, and many captains believed in them thoroughly. At the same time they had very serious disadvantages and as naval gunnery improved in the early 19th century they were abandoned. Their short range was much against them and also they had very little penetrating power, while unless the breaching rope which took up the recoil was very carefully adjusted there was always a danger of the gun coming back against the end of the slide with great force and putting itself out of action, a thing that occurred on more than one occasion with very serious results. The French, who believed in keeping their range and disabling their enemy's rigging, had no use for the carronade and did

not take it up for a long time after other navies had tried it thoroughly. Another disadvantage was that they were so placed that very often they did serious damage to the rigging of the ship that was using them, and occasionally set it on fire.

The Trial of the Carronade.

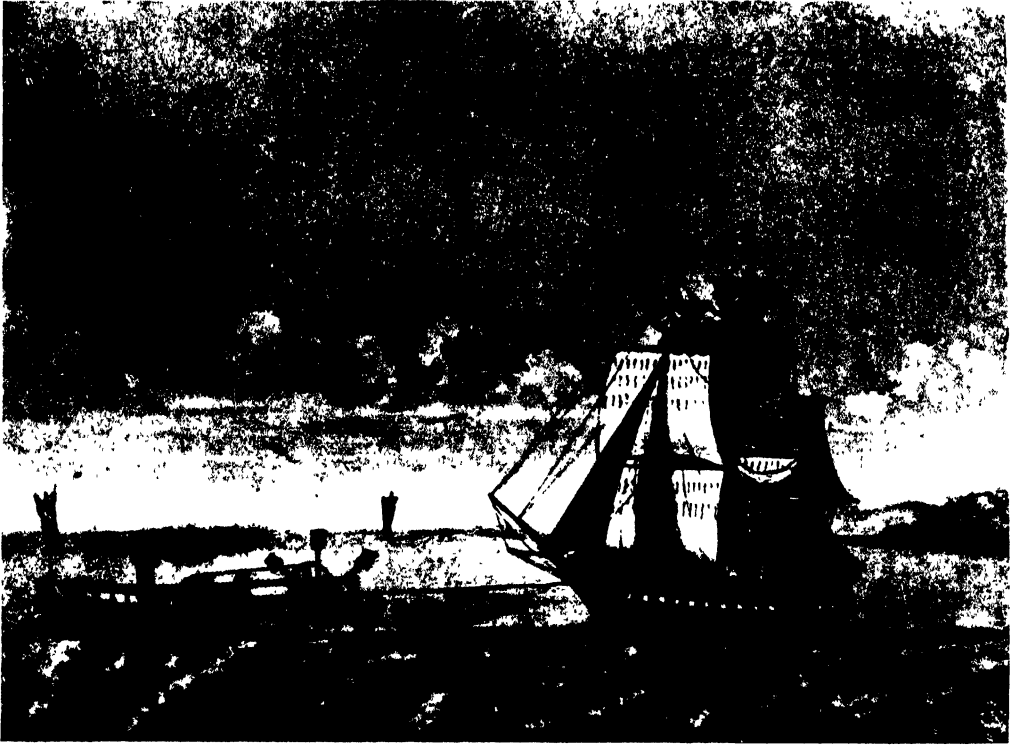
The first trial of the carronade on active service was a rather peculiar one, for after a lot of argument the Admiralty consented to re-arm the frigate *Rainbow* with the new weapon. In the old days she had carried forty-four guns—twenty 18-pounders, twenty-two 12-pounders and two 6-pounders on the forecastle. The broadside with this armament amounted to 318 pounds. With her new armament of carronades she had twenty 68-pounders and twenty-two 42-pounders, with six 32-pounders on the quarter-deck and forecastle, the broadside amounting to 1,238 pounds but the range being very much less than with her old guns. She went to sea in the Spring of 1772 under the command of Captain Henry Trollope and searched in vain for an enemy on whom she could try her new gun. They all contrived to evade her until September, when she came upon a large French frigate. As soon as she got into range she opened fire with her bow chasers, 32-pounders. As soon as the Frenchman found these big shot falling on his deck from a forecastle gun he began to wonder what she would have in her main battery and therefore decided that it would be far safer to strike, although as a matter of fact he could have put up a very good fight, and had he kept his range he would certainly have beaten the British ship before she could get a single shot in at him. The news of this victory caused a tremendous sensation in England and perhaps it gave the carronade greater favour than it really deserved. But for its purpose it was a very useful weapon as long as its purpose was strictly recognised.

The Navy's Gunpowder.

One really cannot wonder at the poor practice made in naval gunnery in the 18th century, for not only was there a very ample allowance made for windage between the shot and the gun, but the elevating and sighting gear was of the most elementary description, and little care was taken to obtain exact charges. "Take about a shovelful of powder" is the instruction given in one of the earliest gunnery drill-books. In 1779 an officer was sent to examine the powder of His Majesty's ships in commission, and found only four barrels of good powder in the whole fleet. There is no doubt that the grossest fraud had been practised by the makers for many years, and this discovery led to the establishment of a Government-owned powder works at Waltham Abbey.

Fighting Tops.

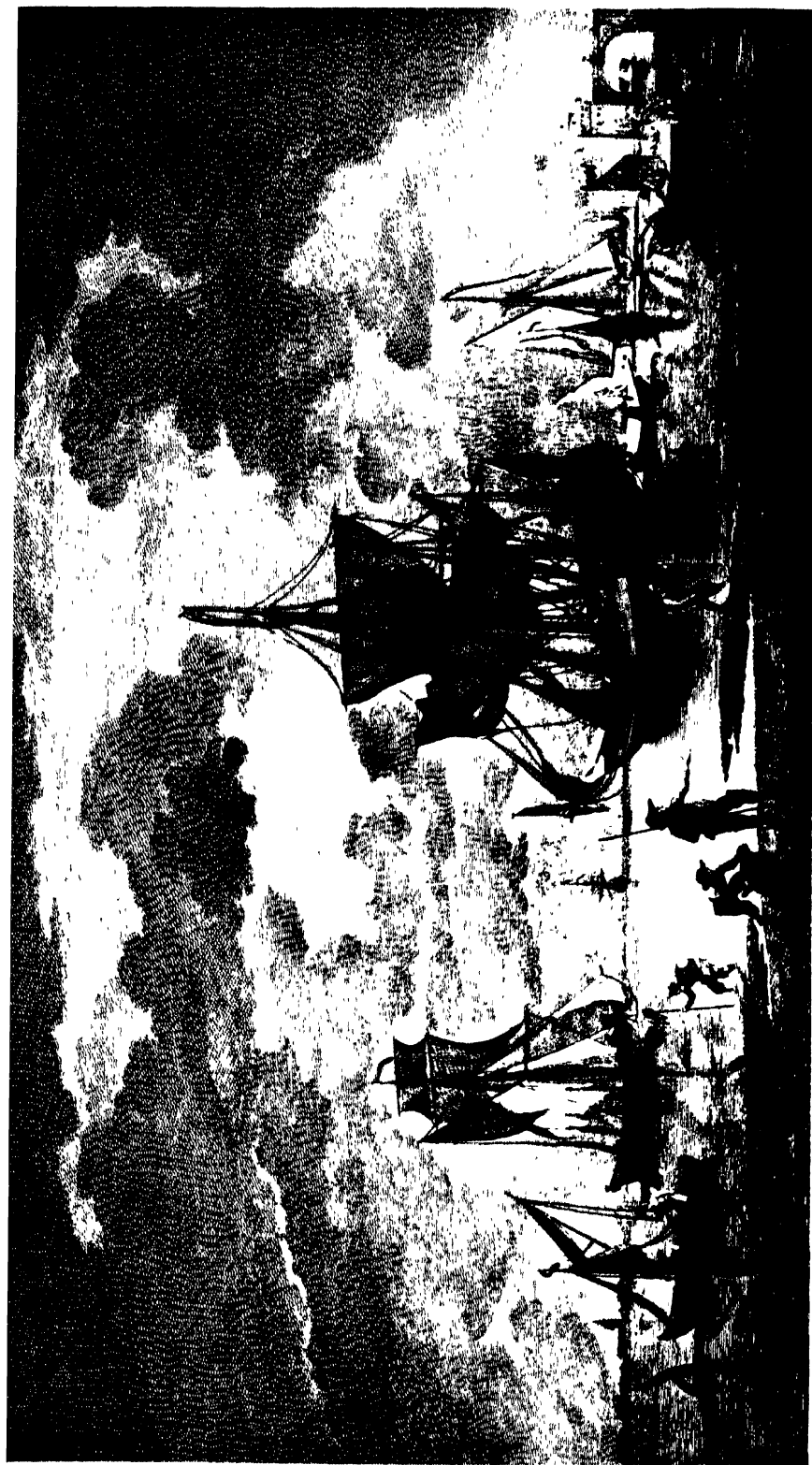
Well into the 18th century stones and other missiles were carried on the fighting tops of certain ships to drop on the decks of their enemies, just as they were in the olden days, but presently they came to be replaced by bombs and grenades. These were sometimes thrown



(Macpherson Collection)

JONATHAN HULL'S STEAMBOAT TRIED AS A TUG ON THE AVON IN 1737

Although he did valuable work as a pioneer, Jonathan Hull's early efforts at building a steamboat eventually came to nothing. The above illustration is from a print published nearly a century later.



"MOONLIGHT"

(ENGRAVING BY CANOÏ, AFTER P. MONNOY, PUBLISHED FEBRUARY 21, 1745-6)

The above picture is of interest as showing early types of vachts employed in the Navy in the first half of the eighteenth century

(From a Print lent by Messrs T. H. Parker)



MODEL OF A DUTCH EAST INDIAMAN OF ABOUT 1740
(SCHEEPVAART MUSEUM, AMSTERDAM)

This model shows clearly the rig and the form of hull of the finest merchantmen of that period.



YATCH "CAROLINA," 1750



YATCH "UNION," ON THE THAMES AT HAMMERSMITH, 1751

In the middle of the eighteenth century the ship rig came in for the biggest yachts, but it was far more usual to find light handy little yachts or yatches of the type of the Union. The print of the Carolina shows George II going aboard, attended by Lord Anson.



THE FIRST "ROYAL GEORGE."
(ENGRAVING BY J. COLE, AFTER BASTON)

Originally built in 1672 as the Royal Charles, rebuilt in 1693 and renamed Queen, again in 1716 and renamed Royal George, this ship was rechristened Royal Anne in 1756 to make way for Kempenfelt's ill-fated flagship, and was not taken to pieces until 1767, by which time little if any of the original ship remained.

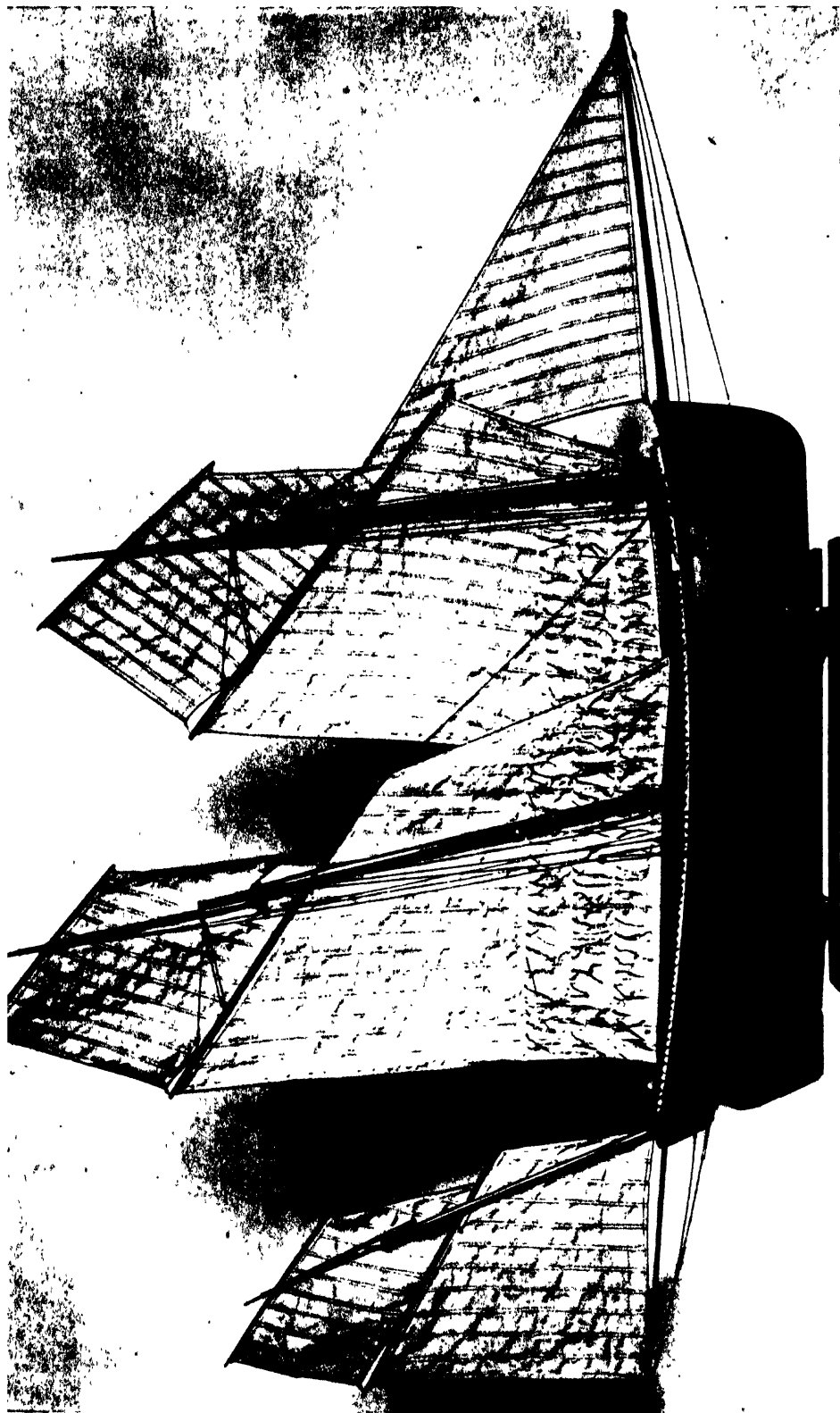
The Plan as Proposed and approved by The Honorable Commissioners of HIS MAJESTY'S Ship for weighing the *Royal George* with her Guns, Shells, and the new legs at Spithead



(Macpherson Collection)

PLAN FOR WEIGHING KEMPENFELT'S "ROYAL GEORGE" AT SPITHEAD
(ENGRAVING BY A. BANNERMAN, PUBLISHED 1783.)

This engraving shows the ship sunk on an even keel as she went down, instead of being capsized in accordance with the popular legend.



MODEL OF THE FRENCH LUGGER "LE COURER," 1775

The French brought the lugger rig to its finest pitch of development, and the vessel shown is a good example of an 8-gun lugger of the period. The model is in the Musée de Marine, Paris.



(Macpherson Collection)

THE CUMBERLAND SAILING SOCIETY'S YACHTS OFF SHEERNESS
(ENGRAVING BY B. J. POUNCE, AFTER J. KITCHINGMAN, PUBLISHED 1778)

Founded in 1773, the Cumberland Society was one of the first Yacht Clubs, but in the early days its activities were more in the direction of formal parades and reviews than of racing.

from the top, sometimes from the yard-arm, from which position they frequently contrived to drop into the open hatchway of an adversary and do tremendous damage. At the same time their use entailed very great danger of fire in the tops, and many commanders refused to carry either sharpshooters or bombers aloft on account of the danger of their setting fire to the rigging and sails around them.

Boarding.

Right on until the coming of the ironclad boarding was a favourite mode of fighting with the British seaman, whose one idea was to get his ship alongside the enemy and either batter her to pieces or else carry her by boarding, just as the Spaniards had tried to carry the British ships in Armada days. As soon as the ships got yard-arm to yard-arm every effort was made to secure them, while the small-arms men and bombers got to work. Ships were fitted with what were known as "close quarters," which were strong houses of wood loopholed for musketry, inside which the defenders could get some sort of protection to beat off hostile boarders. Occasionally they were below deck, with barrels of powder on the deck over them, which could be fired from the close quarters. Boarding nettings were also slung from the rigging down to the bulwarks, frequently of two-inch rope. In the early days the marines and certain mariners carried long pikes, even up to sixteen feet in length, which were very useful at close quarters, and also boarding axes or tomahawks. These latter were very much like the modern poleaxe for killing cattle, having a sharp point at the back of the head as well as a blade. They could be used for cutting away the enemy's rigging and also for making a scaling ladder up the side of an enemy loftier than the attacker. Pikes and boarding axes were carried in His Majesty's ships right into the 20th century, long after they could be of any practical use.

The Size of East Indiamen.

In the early days every effort was made to keep down the size of the East Indiamen, five hundred tons being the limit over which it was necessary to carry a chaplain. The company therefore invariably kept their ships at four hundred and ninety-nine, until it was decided that the trading advantages of bigger ships, and the better powers of defence against privateers and enemy cruisers, made up for the extra cost of the divine. At the end of the 17th century, therefore, they were going up to seven hundred and fifty tons and before long there were ships of twelve hundred and thirteen hundred tons in the Fleet, ships that were very popular both from the point of view of their defensibility and large carrying capacity. Some of these ships were heavily armed, but it must be remembered that as a general rule the guns were not of very big calibre and that the decks were so cluttered with merchandise that it was very difficult to man them even without the constant difficulties of the crews. A large part of the East Indiamen's crews were Lascars who were good enough for handling sail but were hopeless in action except in unusual circumstances, when time and again they distinguished

themselves. As regards the armament, it is to be feared that the ship's husband frequently got away with wooden "quaker" guns until the company got it enacted that the commander and owners of a ship should be fined thirty pounds for each gun that was missing from her legend armament. A further fine of a hundred pounds for both the commander and owner were intended to put a stop to the practice of selling the armament to possible enemies, but it is not unlikely that many guns so disposed of were logged as "jettisoned in bad weather for the safety of the ship."

The Teak East Indiamen.

When first the native Indian shipbuilders suggested that they should build Indiamen of teak, as they had done for the Portuguese before the coming of the English, there was a great outcry among the shipbuilding interests at home, who considered that they would be affected. The Navigation Acts were quoted to such good effect that the seas in which these ships were allowed to navigate were very strictly defined, and they were not allowed to ply west of the Cape of Good Hope or east of Cape Horn. Yet there is no doubt that they were among the finest built ships ever owned by the company, and finally this came to be realised when British builders could no longer keep up with the ravages of the enemy. Then it was that the wonderful teak built ships were appreciated, and not only as Indiamen but also as men-of-war, and some of the finest of the old wooden walls were built by Parsees at Bombay or in one of the other Indian centres.

French Merchantmen.

After finding so many instances of the superiority in construction and design of French men-of-war over their British rivals, it is not unpleasant to find that the tables were turned with regard to merchantmen. In an enquiry which followed the foundering of a merchant ship which had been captured from them, an expert witness pointed out that the timbers of French ships were usually fastened with iron bolts or spikes, which were very liable to grow rusty, and that when they had done so the timbers generally became loose at once and the ships rendered incapable of bearing the sea without perceptible symptoms of decay. This certainly seems to be true, and the workmanship in French merchantmen was very far inferior to that of British.

New England Shipbuilding.

The rapid increase in the shipbuilding industry in the New England states in the early part of the 18th century alarmed British shipbuilders as much as did the Indian progress, with the result that in 1724 they petitioned the Government not to encourage shipbuilding in the New England states because workmen were drawn thither. However, it wanted more than petitions of this sort to put an end to such a vigorous young industry, and the ships turned out in the colonies continued to have magnificent reputations and to be generally sought after, until soon after the War of American Independence, when, British and

Colonial ports being closed to the American flag, the trade of the States was ruined for some time, and with it the shipbuilding industry.

Canadian Shipbuilding.

It was the French who first started shipbuilding in Canada, their first seagoing vessel being the *Galiote* of 1663, and by 1715 there was quite a big shipbuilding industry at Quebec. The French colonists suffered, however, very much in the same way as the British, for the Government at home only wanted Canada for the sake of its furs and would have none of its ships. In 1639, however, it was felt that it would be quite useful to have ships of war built there, for they would be more difficult for the British to blockade, and accordingly orders were given that sloops should be built in the colony. Quite a number were so constructed, the biggest being a 70-gun ship, which unfortunately broke her back in being launched. The bigger warships were not particularly successful on account of the soft wood used in their construction, but with fast corsairs and frigates the colonies did well. It was not until 1770 that shipbuilding came to be tried in New Brunswick, when a schooner named the *Betsy* was turned out, very largely from the material of an old sloop. When the Nova Scotian salmon fisheries were well established a number of fishing craft were built to work the coastal fisheries and also for service on the Grand Banks. When the British took possession of the Maritime Colonies, they used their timber resources principally for masts and spars, of which they were in constant need and for which the timber of Canada was unequalled. In Nova Scotia shipbuilding started in 1751, when a brig was built at Halifax with slave labour. Little was done until 1763, when fishing boats began to be turned out, but it was not until the beginning of the 19th century that Nova Scotian shipbuilding became really famous.

Brigs and Snows.

Among the most popular rigs for British merchant ships at this time were the brig and the snow. At a distance it was difficult to tell them apart, but they could be distinguished by the fact that the fore and aft mainsail had its gaff running on a small trysail mast in a snow, whereas in a brig it ran on the mainmast itself. Being square-rigged on both masts, they required a good many men to handle them, which was just what the Navy desired, and while they could not sail nearly as close to the wind as a schooner they had the advantage that in working up a narrow river they could make stern boards as well as tacks and get up almost any stream, working half the time ahead and half astern. It was not until the competition of steam made economy in men a very urgent necessity that the brig went out altogether; the snow had become very uncommon many years before.

Peter the Great's Navy.

The Czar Peter the Great understood the advantages of sea power to his country and gave it a navy for the first time, at the same time

encouraging merchant shipping. Placing the rule of the country under a regency, he travelled in Holland for information in shipbuilding and found the shallow draught vessels constructed there ideal for his own waters; he then visited England in order to learn all that there was to be known of good workmanship. For a time he worked with his own hands as a shipwright at Deptford dockyard, and received instruction in naval architecture from Sir Anthony Deane in intervals of drinking bouts such as were considered only fit and proper for a Russian grandee of his period. Deane impressed him very much and eventually he engaged Mr. John Deane, his brother, to go with him back to Russia and instruct his subjects in shipbuilding. At the same time Peter himself was more than an enthusiastic amateur, and Deane gives him the credit for having invented a new type of false keel and other appliances.

CHAPTER XIX

The Eighteenth Century Seaman

General Conditions.

As far as general conditions were concerned, the seaman in the early 18th century probably fared as badly as at any time, the worst part of it being that many of his hardships were quite avoidable. In the Navy the discipline was brutal in the extreme, and in the merchant service it was not much better. Reading of what went on, one can well understand that many landsmen at this time marvelled at anybody ever going to sea. Small wonder that the seaman of the day was the roughest of characters, and he got very little inspiration from his officers, for, with few exceptions, they were corrupt and self-seeking. Politics were rife in the Navy, and on more than one occasion bade fair to wreck the service, while owners of merchantmen were squeezing the very last ounce out of their ships, and it was generally the seaman who had to pay for a good deal of it in the long run.

The Navy and the Merchant Service.

At this time there was an extraordinary amount of interchangeability between the Navy and the Merchant Service, officers passing from one to the other and back again, and men doing the same, although frequently less willingly. When peace was proclaimed the custom was to let every seaman shift for himself, with the result that the best immediately tried to get a living in the Merchant Service, and this was the only way in which many naval officers contrived to keep their hands in and maintain touch with the sea at all. Piracy and smuggling also absorbed a large number of the Navy's surplus men in peace time.

Eighteenth Century Naval Officers.

The great change in the social position of the naval officer came when King George III gave Prince William, later to be William IV, what was known as a cockpit education, and scandalised all his courtiers by so doing. That, however, was comparatively late in the century. Before then the old trouble of finding good men had been made worse by the system of cutting down the Navy to nothing in peace time. This bad old system meant finding officers in a hurry as soon as war broke out, and naturally these were apt to be both inefficient and very far from suitable men. During a protracted war the standard improved,

but after the Peace of Utrecht the naval officer was a very poor type, and it took the service many years to get over it.

The Midshipmen.

At this period and long after it was customary for a midshipman to go afloat by introduction to a senior officer in the service. He was fitted out on shore and then shot on board without any preparation for his profession whatsoever, becoming proficient or not according to the trouble that his seniors took in teaching him his work. This was one of the reasons why men remained midshipmen for such an inordinately long time, and it certainly ensured that no man would stick to the service unless he had a real liking for it. It was a very harsh school but it turned out fine seamen, although they were seamen who were often at a great disadvantage when pitted against more scientifically trained enemies from the Continent. The time which a man might spend as a midshipman was very indefinite, and he was liable to be turned ashore, or even to be derated and sent to serve before the mast as a seaman. Naturally, when this latter course was taken, it bred mischief-makers in the forecabin and was the cause of a lot of trouble.

The Lieutenants.

The time that a man spent in the midshipmen's mess before he was promoted to the gunroom—in those days there was no wardroom, and the gunroom, which now accommodates the midshipmen was used by their seniors—varied immensely according to the luck of the officer and his personal influence, and this held almost as much when a man was promoted lieutenant. Active service had a good deal to do with promotion, but a good, sound, slogging man might remain without command for many years, while influence jumped his juniors over his shoulders. Small wonder that there was a large body of elderly, embittered lieutenants in the service, who saw no prospect of advancement but who could not afford to retire.

The Petty Officers.

One of the great troubles of the Navy was the lack of opportunity for petty officers, for comparatively few contrived to reach higher rating without exceptional luck. Naturally, the handling of the sails and the management of a big ship's company rendered a large number of good petty officers absolutely necessary; but although they were granted certain privileges, they were liable to be thrown out of the service at the end of a war, just as were the seamen. One of their privileges was that they were not supposed to be flogged, but some old post-captains who believed in the lash above all things soon got over this. Their method was to call a petty officer down from aloft, disrate him on deck, have him triced up and flogged, and then immediately re-promote him petty officer and order him back to his station. The quartermasters were perhaps the most favoured as regards promotion, for they were very frequently chosen to be master's mates, and in any circumstances their position on the quarter-deck gave them a far better chance of coming under the notice of the officers than their fellows.

The Boatswain.

Of the warrant officers the boatswain is by far the most picturesque, although Marryat's novels incline one to take a very kindly interest in the carpenter. The boatswain was in charge of all cordage, and in addition had a good deal to do with the discipline of the ship. For this purpose he carried a rattan cane which he did not hesitate to use on the backs of his luckless subordinates, with or without excuse. One of the reasons that the 18th century seaman was continually on the verge of mutiny was that the warrant officers were given great power without being carefully selected for exercising it. The result was harsh discipline which was apt to spoil the best of men, and when the ability of their seniors on the quarter-deck was not above reproach, things were apt to get into a very bad way on board. The boatswains, however, were almost invariably magnificent seamen, and many a midshipman received from the boatswain all the practical instruction that he was afforded on board ship, most of the officers being quite content that he should learn for himself somehow and be severely punished if he failed to do so.

The Purser.

In a modern man-of-war there is a good deal of quiet fun taken at the purser on account of his opportunities of getting rich, but in the 18th century these stories were believed in implicitly by the seamen, who saw in him the cause of all their troubles. He was generally far and away the best hated man in the ship, all the faults of the Admiralty or the victualling contractors being laid to his discredit, but although the men chosen for the purpose were certainly generally ill selected and the large majority of them took the opportunity of making all the money they could, in this they were only acting in imitation of their seniors, and there is no doubt that a very large part of the blame that they got was undeserved. Theirs was a thankless job at the best of times.

The Surgeons.

The surgeons who were sent to sea in the 18th century were certainly a very poor crowd. For one thing, they were far too few, and for another, they were very often hopelessly incompetent. Their status on board ship was of the poorest, and it would have been surprising if the Navy had contrived to get decent men for this important branch of the service. It was a good thing that the seaman was a hardy animal, otherwise he would certainly have died off even more quickly than he did, owing to the attentions of the men who were supposed to cure him. Once again it has to be pointed out that Smollett is prejudiced in the way he writes, but at the same time he went through what he describes, and it is a tolerably good picture of the naval surgeon of the time.

The Chaplain.

Taken in the main, the chaplain was rather better than the surgeon, although frequently he was very ill fitted for his office. Then, as now, he had no rank, and his pay was somewhat uncertain, being made up of

a deduction from the seamen's pay. Sometimes he was treated as a lieutenant and sometimes as a warrant officer : it seems to have depended very much on the whim of the captain until his status was definitely laid down. There are records of many who could drink with the hardest-headed men in the ship, and also of many others who did their very utmost to make the life of the seaman bearable.

Manning the Fleet.

All sorts of ways and means were adopted for getting seamen into the fleet, according to the needs of the moment, but the stand-by of them all was the Press Gang, which had really started in the reign of King John. This is generally regarded as an 18th century institution entirely, but as a matter of fact it had existed and been in active operation long before that, although that period was the one with which one generally associates it, on account of its activity. In 1696, copied very largely from the French, a registration of seamen was adopted, which offered them many and pretty considerable advantages on condition that they served in a sort of naval reserve. This scheme was an utter failure and soon had to be dropped. After that the manning of the fleet was kept up by the Press Gang, the sweepings of the gaols, and men who enlisted voluntarily on promise of a bounty or in response to advertisement.

Recruiting by Advertisement.

Alongside the Press Gang, but principally at the extreme end of the 18th and the beginning of the 19th century, there was recruiting by advertisement. A captain, especially if he were well known in the district, would generally make a local tavern his headquarters and advertise for men. Some of these advertisements are distinctly amusing, and do not err on the side of modesty. Whether he got men by this means or not depended entirely upon his reputation, both for getting prizes, which was the point invariably emphasised in the bills, and also for his treatment of the seamen. Some captains had no difficulty in filling their list in a few days, while others did their best but invariably had finally to fall back on the Press Gang. Line-of-battle ships got very little prize-money and therefore were not as successful in recruiting by advertisement as were the frigates.

The Press Gang.

The name " Press Gang " is a corruption, for, from the earliest days, when the men who were taken in that way were described as " prest " seamen, this merely meant that they were ready for service, but later it came to mean that they were pressed into the Navy, and one name was certainly quite as appropriate as the other. All through history there have been occasions on which it has been necessary forcibly to impress men, but in the earlier days it was thought preferable to tempt them by high rates of pay. The Tudors made compulsion a regular feature in time of emergency, and the Stuarts followed them. As the need for seamen increased, and no opportunities were offered him to make good money otherwise, the press became more general, until the

18th century saw the greater part of the fleet manned in this way. In seaport towns a Press Gang was generally composed of seamen, but this was not by any means necessary, and inland it was almost invariably composed of landmen. The only thing necessary was brawn. The great value of the Press Gang to the landman was that, when he was discharged from it, he had the undertaking of the authorities that he would not be pressed as a seaman. The seaman who was employed in it had no such guarantee, but as a rule he had an undertaking that he would not be sent to the same ship as the men whom he had taken. Without this it is to be feared that he would have had a very bad time afloat. At one time there was a bonus of a shilling a head on the men pressed for the Navy, but this proved such a temptation to fill the Navy with every sort of undesirable that it was soon abandoned, and the men returned to their regular pay. The regulating captain was in charge of each gang, although his rank in the Navy was generally a lieutenant. His pay was a pound a day, with various allowances, and he had as assistants two or three lieutenants and a number of midshipmen. Some of these midshipmen had never been afloat and were well on in middle age—in fact one man from Hull was acting in this capacity until he was over sixty. Needless to say, the loose organisation of the Press Gang gave rise to any number of abuses, as did also the method of getting information of likely men. It is to be feared that “divorce by Press Gang” was a very usual procedure in the 18th century. The gang was supposed to have a regular headquarters which was hired for the purpose, but very often this was either non-existent or insufficient, and in lieu the men were lodged in the local gaol. As gaol fever was very prevalent it meant that disease was carried to the ships to an appalling extent, while naturally the men who were being forced into the King’s service, through no fault of their own, were greatly humiliated.

Resisting the Press Gang.

In the early days barbarous punishments were provided for men who attempted to evade naval service, but as time went on it was realised that a seaman who had been well and thoroughly hanged was of very little further use to the Navy, and therefore these punishments were gradually lightened. Finally they disappeared altogether, but at the same time the Press Gang was given infinitely more power to use force, with the result that, although a man could attempt to save himself without fear of the law, he would probably have such a bad hammering from the gang that the majority preferred to go quietly. It will be admitted, of course, that the methods of the gang were brutal, but at the same time it must be realised that the fleet had to be manned, and owing to bad management and bad victualling the service was extremely unpopular with seamen. Hence, while it appeared impossible to put things right at the root, impressment was unavoidable.

The Case of Nicholas Cooke.

It is very natural that an institution like the Press Gang, based as it was on usage and necessity without the least foundation on justice,

gave plenty of opportunity for abuses. Most of these were vulgar and rather uninteresting cases of tyranny, but that of Nicholas Cooke in 1775 is raised above the average by its very audacity. This gentleman forged a warrant for himself, giving himself the rank of lieutenant to which he had not the least right, and then hired a small trading vessel, the *Providence*, to cruise round the Irish coast and press seamen. When he had got his ship full he made for Liverpool, with the intention of selling his victims to merchantmen at a good stiff sum in blood money. However, he contrived to pile the ship up just inside the Mersey and H.M.S. *Seahorse* attempted to render assistance. As soon as her captain reached the wreck he was astounded to find her crowded with seventy-three Irishmen, whom he immediately pressed into the Navy and, investigating further he found that in addition to his ingenious kidnapping schemes Cooke was smuggling in a quantity of contraband spirits, and it was for this and not for the forged warrant that he was prosecuted and convicted.

Impressing Foreign Seamen.

When Peter the Great was forming the Russian Navy his great difficulty was to get men for it. The Russian serfs were indifferent seamen and although he could persuade plenty of retired and half-pay officers from the British Navy to take service with him it was a different matter with petty officers and men. Therefore he instituted a Press Gang and visiting the British ships in Russian ports he took one man out of nine. There was great indignation at this and a strongly worded protest was sent across, but the Czar's answer was merely that he was following British custom and that every prince had the right to take what he liked out of his own haven. Unfortunately there was no answer to this argument, for on many occasions British ships had been manned by seamen pressed out of foreign visitors, and as lately as the reign of Queen Anne it had been made quite a general custom.

Women on Shipboard.

Besides the numerous women who contrived to smuggle themselves on to His Majesty's ships in men's clothes, and their number is surprisingly high, the old time ships carried quite a number of women on board. For coastwise voyages the regulations were very slack, and even for long voyages the petty officers carried their wives as often as not. Incidentally, some of these petty officers' wives did magnificent work attending to the wounded in action, and some of them bore themselves right gallantly in a boarding fight. Apart from these, however, as soon as a ship anchored in a home port, a host of harpies crowded on board and the scenes below deck were indescribable. If the men were allowed ashore they would certainly desert, most of them having come into the service most unwillingly, so that the Admiralty condoned this state of affairs, which was really a disgrace to the service. Later in the 18th century, however, matters improved, and in 1778 orders had been given to many ships that if any shore boat with a woman in it were seen coming too close to a man-of-war, she was immediately to send off a boat, press

the boatman into the fleet, and turn the woman ashore. In the middle of the 19th century, to get ahead of our story, the regulations had become so rigorous that captains were strictly forbidden to carry their wives when proceeding to foreign stations. The regulations omitted to forbid them to carry one another's, so all was peace.

Desertion.

While the punishment for resisting the Press Gang was reviewed, there was no inclination to do anything that might encourage desertion once the men were caught and trained, and the punishments were still very severe. On the other hand, it must be admitted that desertion went on just the same, and no measures were effective in preventing it. The distribution of pay and prize-money was deferred in order to persuade men to stay in the service, but soon the need of trained seamen became so great that there were many occasions on which a man was offered the pay that he had actually forfeited, on condition that he returned to the service. Thus he was in the curious position of being forced to desert and forfeit his pay in order to get it; but there was always the chance of his being caught by the Press Gang first, and this very often occurred as seamen notoriously stick to their old haunts. If this happened and he were taken on shipboard, he would forfeit all chance of getting this pay or any advantage. George I prescribed death by hanging as the punishment for desertion, but seamen soon became too scarce to be wasted in this manner, and therefore the punishment became a flogging. It might be 700 lashes. On the other hand, the punishment for enticing seamen to desert was very severe. First of all it was death, and later imprisonment or transportation, but where the enticer was a crimp who was trying to get men for the merchant service—often enough only to have them pressed back into the Navy—it was usually left to the Navy men to inflict the appropriate punishment, which they did with all goodwill. Many a noted crimp was pressed into the Navy and had a particularly bad time of it. In addition, the keenness of the Press Gang was whetted by the fact that they were given a bounty of twenty shillings for every deserter apprehended and sent back to his ship.

The Seaman's Pay.

There was certainly little enough in the matter of pay to attract the seaman and keep him in the service. The rates were laid down by the law, but in order to prevent men deserting during a commission, it was usual to defer their pay until the ship paid off, with the result that sometimes men were as much as five and six years without pay. What happened to the wives and families of pressed seamen during this period may be left to the imagination. Prize-money was nearly as bad, and as this was the only real allurements that the Navy could hold out, for it promised adventure as well as gain, its being withheld caused grave discontent in the fleet, and was one of the principal reasons of mutiny. In 1774 prize-money was fixed at the value of all property in prizes taken by ships, to be divided among the officers and crews of the

captors, and it was also provided that if a share was not claimed within three years, Greenwich Hospital should have it. The division of prize-money, however, caused a lot of trouble with the men, and this is not surprising when one hears that at the capture of Havana in 1762 the admiral in command and the general who led the land troops received nearly £123,000 each, while a post captain got £1,600, a petty officer £17 5s. 3d., and an able seaman or private of marines only £3 14s. 9½d. In addition to low pay and the difficulty of getting it, there was the "sixpenny office," which was always regarded by the seaman as a gross breach of all justice. For many years 6d. per pound per month was deducted from the wages of all seamen, and was supposed to support Greenwich Hospital, in addition to the unclaimed shares of prize-money that have already been mentioned. The complaint of the men was firstly that they got very little benefit from Greenwich Hospital; and secondly, that infinitely more sixpences were deducted from the pay than were handed over to the hospital fund, both of which contentions had a good deal of truth in them. The seaman also complained bitterly of his victualling, and certainly, although the scale looked very much better on paper than had been attained in the seventeenth century, it left a good deal to be desired when it had to be eaten. The beef was so poor that it shrunk to a half in cooking, and then was almost uneatable, while the pork was generally rancid. To show what provisions were provided for the seaman, it may be mentioned that the authorities laid down a procedure for sweetening a ship after she had been fouled by putrid rations. Yet they would not hear of any complaints, and constantly maintained that the seaman had all that he could possibly desire.

Widows' Men.

On the books of practically every warship in commission were borne a number of "widows' men," which term needs a certain amount of explanation. As a matter of fact, they did not exist, but certain names were enrolled in the ship's pay-books and the pay and prize-money that would have accrued to them went to the upkeep of Greenwich Hospital. Considering its various sources of revenue, it must be admitted that this hospital really should have done very much more for the distressed seaman than it ever attempted to do.

The Seaman's Drink.

From very early times it was customary to ship beer in His Majesty's vessels of war as drink for the seamen, this being the only drink to which they were accustomed and the only one to which they took kindly. The trouble was that the beer was not as a rule good to begin with, and that when it had been well shaken up in the hold of a ship it soon became so sour that it was not only undrinkable but that it had to be poured over the side in order to keep the ship herself sweet. Also, of course, the difficulties of stowage, when all stores were cut down to their lowest possible level, were very great and so it came about

that ships on foreign stations would replenish their supplies of alcohol with the local wines. Then it came into fashion to ship rum instead of beer, a much more sensible proceeding in view of its smaller bulk and its infinitely better keeping qualities. The seamen liked it better too, but at the outset it was served out with a far too generous hand and the result of a strong tot just before the ship was snugged down for the night was almost inevitably a big list of casualties. It was Admiral Vernon, who in bad weather wore a famous coat made of green grogram, who first had the common-sense idea of watering down the rum and it has been known as "grog" ever since. To begin with this was in no way intended as a term of endearment or appreciation of the Admiral's forethought. It was at the same time that stoppage of grog for minor offences became general in the Navy, and not unnaturally the Admiral got blamed for this as well.

Discipline in the Fleet.

Thus we have the whole vicious circle. Men were pressed into an unpopular service against their will. They were badly fed and badly paid, and in consequence were chronically discontented. As a cure for this, the most barbarous discipline was inflicted, and this only made things worse. In many ships flogging was an almost daily occurrence, the offender being triced up to the gangway jears and flogged with a cat-o'-nine-tails by the boatswain's mate. This punishment was supposed to be awarded in one dozen or multiples of a dozen, but as a matter of fact it sometimes ran into thousands. Frequently all the men on a sail would be flogged for slackness in taking it in, while very often a genuine case of illness was flogged first before he was passed over to the surgeon. The lash was awarded for laughing and for every conceivable offence, no matter how slight. It was a point of honour to bear the flogging without flinching, but as a matter of fact many a man died under it, and the pain of the waxed cord must have been excruciating. In addition, the warrant officers and officers carried their rattan canes and laid about on the backs of the unfortunate seamen for any or no offence. But in the end it must be admitted that the average 18th century seaman was difficult to control by any other means, once he was aboard, although whether the means might not have been easier had the service been less corrupt at the top, is a matter that might well be argued. Nelson and one or two others contrived to do with a minimum of lash, but the average officer found it absolutely indispensable for keeping his ship going.

The Mutiny of the "Chesterfield."

It would be impossible to enumerate all the mutinies that besmirched the naval records of the 18th century, and it is only possible to take one of the worst. The case of the *Chesterfield* will suffice. The *Chesterfield* was a 44-gun ship that was sent to the West Coast of Africa in 1748. She was commanded by Captain O'Brien Dudley, a blustering bully who appears to have had few good qualities. He was sent to inspect the defences on the coast, but he preferred to live in something

like Eastern state on shore, with the result that the First Lieutenant Couchman and the carpenter's mate, John Place, together with Lieutenant Morgan of the Marines, fell a-plotting. Most of the officers and lower deck men were given leave to go ashore, where the captain was already established with a large part of the wardroom, and the mutineers, about forty in number, had not the least difficulty in seizing the ship and putting to sea. Couchman does not appear even to have had the spirit to be a decent pirate, for the gunner and a midshipman, with a few honest hands that they found among the crew, opposed the mutineers and regained possession of the ship. In parenthesis it may be mentioned that even the loyal men had not the least intention of going back to their captain, and accordingly sailed the ship to Barbados, where they handed her across to the proper authorities. Place was hanged and the two mutinous officers were shot.

The "Milford."

At the same time it must not be thought that all the mutinies that were reported during the 18th century were all on the surface. Sir George Rooke in his diary for 1701 has an entry which is an illuminating side light on the conditions of the time. He writes: "This morning received information that Captain Moses of the *Milford* had been attempted to be assassinated and was shot in the leg. Upon which ordered Sir John Munden to go on board that ship with the Judge Advocate, Captain Gifford, and Captain Leake to enquire therein, which they having done by the best examination they could make, found upon the oaths of the officers and the circumstances, that he was shot by himself, and as supposed was done on purpose to strengthen his case against Mr. Stucley, his lieutenant, and Mr. Brookes, his midshipman, whom he had confined for above six months. Held a court martial on Mr. Stucley and Mr. Brookes of the *Milford* for mutiny; they were both acquitted, the Captain's accusation appearing frivolous and vexatious." This is one of the few instances of this sort of thing that have got into the history books; how many more passed by unnoticed except by their unhappy victims can only be estimated. Captain William Moses was certainly not a naval officer of the type of which the service can be proud, but it is impossible to pretend that he was an isolated instance, and in the 18th century all too many of his messmates were of the very worst type, who should never have been given His Majesty's commission. Smollett's picture of the Navy is naturally suspect because he was a notorious malcontent, but at the same time it contains much that must be accepted as true, especially when supported by such practical men as Marryat, who had no axe to grind.

Scurvy.

Another ingredient in the seaman's wretchedness in the 18th century was the prevalence of scurvy, for it is difficult to imagine a more depressing ailment, and its ravages were frightful. It was not until Captain Cook proved the value of lime-juice as a preventive that it was generally taken up, although one or two captains had made experiments before that.

Sauerkraut also was frequently supplied for the same purpose. After Cook's demonstration the general issue of lime-juice was ordered, and while Mediterranean limes were used it was entirely successful. Later, motives of Imperial policy caused West Indian limes to be bought instead, but these had not the same qualities, and the fact that there was far less scurvy in the fleet while they were being taken merely proves that the treatment of the men was gradually improving, and that they were not so liable to attack. In these days of the greatest care of the seaman's health it is almost impossible to imagine the ravages of the disease on board ship in the 18th century.

Paying Off and Turning Over.

Considering how short the Navy invariably was of seamen, it is remarkable that nobody ever tried to put a long service system into effect until the middle of the 19th century. Sometimes a ship that was ending her commission would keep her crew intact and turn it over entire to a new ship that was commissioning; more often the men were simply turned out into the world to fend for themselves until they were pressed back into the service. As they took with them their accumulated pay, it was generally not long before they had squandered it and were caught again, but the waste to the service and the bad blood engendered was as appalling as it was unnecessary. As an economic measure it was a hopeless failure, and was bad from every point of view, Nelson describing it as "the infernal system." If a man were seriously ill he was simply left to look after himself, the country washing its hands of him after he had been treated at public expense for thirty days. Frequently men discharged to shore in this manner carried infectious diseases into the various towns, and they certainly were not popular. Occasionally a man with a serious wound would be admitted into Greenwich Hospital, or even be granted a small pension to keep him outside, but these lucky ones were a small proportion of the men who were discharged sick. In the middle of the 18th century the Marine Society, which does such splendid work training lads for the sea nowadays, did its best for the discharged men, but it was little enough they could do.

The Crews of the East Indiamen.

The pick of the merchant seamen were undoubtedly those who manned the East Indiamen, for every effort was made to keep them British, while the majority of the remainder of the mercantile marine was manned almost entirely by foreigners. That was the principal reason why East Indiamen made such a tempting bait for the Press Gang, in spite of all the efforts of the Court of Directors to obtain the privileges that had been granted them. The pay of the John Company's seamen in the early days of the eighteenth century is rather interesting. The captain received £7 a month, but of course the perquisites were so great that he had every chance of making a fortune. The first mate got 10s. less, the surgeon £3 10s., with as much as he could make out of his patients among the passengers, while the warrant and petty officers received from £2 15s. to £3 5s. An able seaman got £1 15s., while the

senior trumpeter got £3 10s., although what use he was in the running of the ship it is difficult to see. By the standards of the day the allowances for the dependents of seamen who lost their lives in the defence of the ship were generous, while if a man were wounded he would be nursed back to health at the expense of the company, an example which might well have been copied by the Royal Navy. Unfortunately, so many seamen either deserted or died during or at the end of the outward voyage that the homeward passage was very often made with a very sparse company. Deserters from the East India Company's army mostly tried to get home by the ship, and naturally it was made a very serious offence for the captain to sign on such a man. Otherwise, he had to fall back on Lascars, but the Navigation Acts prevented their being employed as seamen on the outward voyages, and they had to be kept in the port until they could be taken back to India as passengers. The Indian coasting trade employed many ships manned entirely by Lascars, with white officers.



(Macpherson Collection)

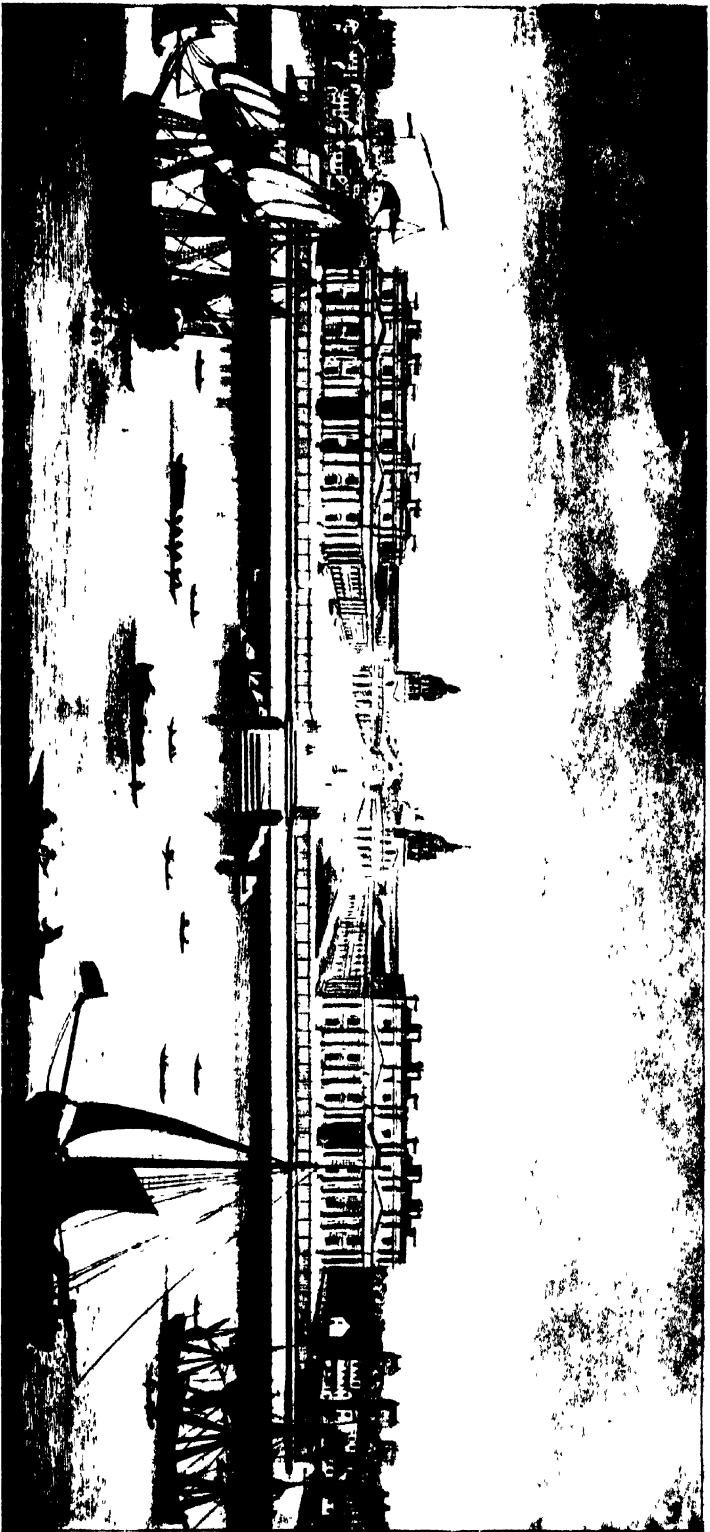
THE FREE BRITISH FISHERY OFF SHETLAND
(ENGRAVING BY ANTHONY WALKER, FROM A DRAWING BY T. CRASSELL)

The importance of the herring fishery may be inferred from the number and variety of vessels here shown assembled off Shetland. In the foreground to the right is a Buss with nets spread, a grampus in the middle foreground showing that a shoal of herrings is near. In the centre is the Superintendent's ship, Prince of Wales, 20 guns, and near by, to the right, two "Jagers," or tenders, for taking the catch to market. On the extreme right the English man-of-war Peggy is firing at a French fishing vessel, white on the left of the picture is a Dutch Buss making sail, and behind it (10) a Dutch Commodore Dogger and (11) a Dutch fly-boat or hospital ship.



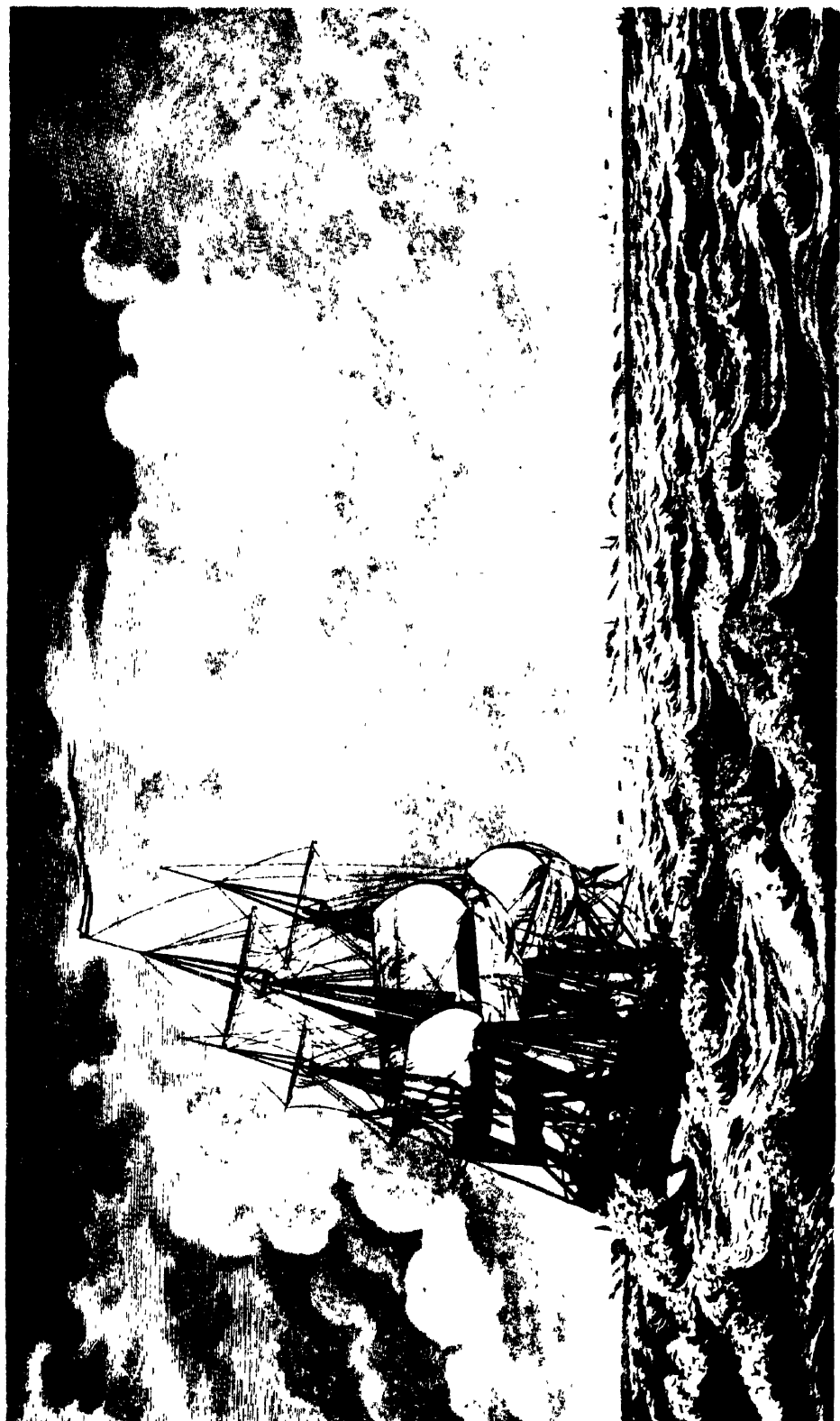
THE "PITT," EAST INDIAMAN
(FROM AN AQUATINT BY EDY, AFTER D. SERRES, R.A., 1787)

William Pitt was a very good friend to the East India Company, and it was natural that one of their finest ships should be named after him. As was sometimes done in those days, the engraving shows her from broadside and stern.



GREENWICH HOSPITAL. C. 1745
(FROM A CONTEMPORARY ENGRAVING)

In the middle of the eighteenth century, Greenwich Hospital was doing splendid work for the seamen although there were many abuses and it was constantly complained that money collected was not spent.
(From a Print lent by Messrs T. H. Parker)



(Macpherson Collection)

WRECK OF THE DUTCH EAST INDIAMAN "WOESTDUYN," 1779
(FROM AN ENGRAVING PUBLISHED IN 1780)

VOLUNTEERS

FOR

THE

Royal Navy,

To be raised by the *EAST-INDIA COMPANY.*

The Largest BOUNTY ever given CONTINUED

TO ALL

**Able Seamen, Ordinary Seamen, and
Able-bodied Landmen,**

Who are willing to enter as **VOLUNTEERS**, to serve in

HIS MAJESTY'S FLEETS.

NOW IS THE TIME

For all Brave Fellows to come forward, and serve their King and their Country, and for their particular
Encouragement they will be entitled to the following **BOUNTIES**, viz.

Every Able Seaman, including the King's Bounty	- - - -	£ 31 : 5s.
Every Ordinary Seaman, including the King's Bounty	- - - -	23 : 10s.
Every Able-bodied Landman, including the King's Bounty	- - - -	17 : 5s.

R E A D Y M O N E Y,

One-Third of which will be paid immediately on the Volunteer being regulated, and the Remainder within Four
Days after the First Muster, and positively before the Departure of the Ship for which he is engaged.

Besides which the *Marine-Society* will provide the Landmen with **CLOTHING.**

Repair, my Gallant Hearts of Oak, without **LOSS** of **TIME**, to

Lieutenant Donadieu,

At the Nag's-head, Postern-row, or King's-arms, Tower-hill,

The PRINCIPAL PLACES of Rendezvous of the EAST-INDIA COMPANY;

Or to the Rendezvous of either of the Officers appointed to raise Men for His Majesty's Navy in London.

N. B. All those who may come forward to enter, will be protected by the Force of Rendezvous, and from Action on Board
the respective Vessels they may be appointed to; where, after passing Muster, and being Regd, they will be entitled to the
Bounty, without any Detraction whatever.

GOD SAVE the KING! And Success to the NAVY of Great-Britain.

(Marpherson Collection)

ADVERTISEMENT FOR RECRUITS FOR THE NAVY

Constant efforts were being made to get seamen without the
help of the Press Gang. In this particular case, the East India
Company is co-operating, presumably to protect its ships from
the Press.



MANNING THE NAVY.
(ETCHING BY BARLOW, AFTER COLLINGS)



(Macpherson Collection)

THE LIBERTY OF THE SUBJECT.
(BY GILRAY, PUBLISHED 1779)

Although apparently necessary to the manning of the Navy, the Press Gang was abolished in 1793.



Jack Oakham throwing out a signal for an engagement.

"JACK OAKHAM THROWING OUT A SIGNAL FOR AN ENGAGEMENT."



The Sailor's Return.

"THE SAILOR'S RETURN."

The popular prints of the period (i.e., the last quarter of the eighteenth century) always show the seamen returned with plenty of prize money.

CHAPTER XX

The Continental Empires, Their Trade and Shipping

The 18th Century.

The 18th century seems to be principally known for the expansion of the British Empire, but it was an age of imperialism throughout the world, and although the British Empire expanded more than any other, partly by new discovery and partly by taking territory from her neighbours, the whole world was consolidating into its various empires. By the end of the century, when the revolutionary wars were breaking out, this process had been practically completed, only to begin all over again.

The Spanish Empire.

The might of Spain, which at one time seemed likely to rule the world, was already on the decline, but there was still a vast empire left to her. A large part of the West Indian Islands, Mexico and Florida, the greater part of the east coast of South America, including the rich settlements on the River Plate, Peru on the west, and the Philippine Islands in the Pacific, were the principal Spanish colonies, and from these the empire continued to draw the greater part of its wealth.

Spanish Commercial Policy.

Spain has never been a nation of traders in the best sense of the word, and immediately she began to build up an empire she put so many restrictions on its trade that its development was hopelessly hampered. Restrictions were imposed not only against foreign countries—which after all was only the general policy of the time—but also on inter-state trade between the various South American colonies, with the result that very soon Spanish shipping declined and all the trade was carried in Dutch or English vessels which flew the Spanish flag but which made no pretence as to their nationality. Under the Treaty of Utrecht one 500-ton ship a year was allowed to Porto Bello, but the English were not slow to see a loophole in this treaty and this one ship was always replenished by others, until it had landed literally scores of cargoes. In 1702, on the death of King Charles II of Spain, the restrictions had become so onerous to trade that England, Holland and the Empire made an alliance for the purpose of stripping Spain of her colonies, but it came to nothing. The contraband trade went on, and it was the

Spaniards' action in searching British ships in American waters that led to the War of Jenkins's Ear (see page 18). Until 1778 Seville and Cadiz had the monopoly of commerce with the American colonies, and in the West Indies Vera Cruz and Porto Bello had the monopoly of trade with Spain. This naturally caused great discontent in other provinces, and in 1778 practically all the important harbours on either side of the continent were thrown open. So strict were the regulations that the Governor of Juan Fernandez in 1788 was relieved of his position for allowing the American ship *Columbia* to put into his port by stress of weather. Foreign aggression, from the Portuguese as well as from the English, caused trade to be further handicapped by the Spanish policy of choosing their ports purely from the point of view of defensibility.

Spanish Communications.

For some centuries the principal communications between Spain and her colonies were maintained by the treasure galleons which made such a tempting bait for the British corsairs, but in 1764 a line of packets with monthly sailings was started between Corunna and Havana. Practically all the other parts of the Empire were very ill supplied with communications, with the result that interlopers soon found their way in and, once there, they were seldom content with the more legitimate forms of profit. Spain's efforts to maintain her monopoly were almost heartbreaking, but at the same time one must admit that it was very largely through her policy of not paying her public servants that the contraband trade attained the proportions that it did.

Portuguese Seclusion.

In an earlier chapter it has been shown how the Portuguese closed their empire to all visitors, and this policy was continued as long as it was possible. This attitude was encouraged by the church, and the French and Portuguese priests were constantly fighting for the supremacy, which frequently interfered with their religious duties. In the case of England, however, the Portuguese seclusion was apt to be broken, for after the Spaniards had conquered their country its trade could only recover with British aid. So it came about that the Portuguese Government was forced to give to British traders far better commercial privileges than it gave to their own people. English goods were very necessary to Portugal, but theirs were only a convenience to the British, with the exception of Brazilian cotton. However, the Portuguese had the most favoured nation clause in their agreements with England, and goods from Asia and elsewhere were allowed into the country. It must be confessed, however, that this was always something of a failure, and in 1784 the Calcutta authorities declared that the Portuguese sailors were a nuisance; accordingly they were forbidden to be in the city after five o'clock at night or before seven in the morning. Orders such as this caused a good deal of heart-burning, but the majority of them were far less stringent than those that had been imposed by the Portuguese themselves in earlier days.

Danish Shipping.

Compared with her big neighbours, the empire of Denmark was negligible, but her men were seamen from the dawn of history, and they were not long in building up a big overseas merchant service. In the earliest days of the 18th century Denmark was practically a neutral in Europe, so that the island of St. Thomas had its harbours full of French, English, Spanish and Dutch ships, picking up quite a good trade which they could not do in their own islands. The Dutch were predominant in this, and had made themselves masters of the greater part of the trade until the Danish traders, naturally jealous, formed a big secret association which included many foreigners. They bought ships in Amsterdam and sent them out to their own island of St. Thomas under the Dutch flag. The Danes already had an organisation in their West India and Guinea Company, and finally this was so strengthened by the new association that the Dutch were excluded altogether. In 1775 this company was taken over by the Danish Crown, owing to the interest of King Frederik V, but by this time it was quite firmly established.

The Danes in the East.

Meanwhile the Danes were working themselves into a strong position in the East, for they made few enemies and on many occasions were admitted where other shipping powers were rigidly excluded. Danish claret was sold in Calcutta under the protection of the East India Company, and many passengers travelled home under the Danish flag rather than in East Indiamen. While Denmark was neutral, this was a very useful alternative to running the risk of French privateers, and one cannot help being struck by the large number of Danes who called in at St. Helena for provisions and water while it was in the possession of the East India Company.

The Young Peter the Great.

The man who was afterwards to mould the Russian Empire gave very little promise of greatness as a youngster, for he meekly submitted to the regency of his half-sister and did not appear to have any interests beyond a certain amount of study of Western methods and nightly orgies which surprised even the Russians. The story of the beginning of his interest in the sea is worth noting. In 1688 he visited a kinsman near Moscow, and in an old shed discovered what was left of an old boat that was reputed to have been sent by Queen Elizabeth as a present to the Czar Ivan the Terrible. A Dutch shipwright made her seaworthy and immediately the young Czar was delighted at the way she handled compared with the clumsy flat-bottomed craft to which he was accustomed. Three or four others were built after her pattern, but it was then some years before political events permitted him to enjoy his hobby of boat sailing again as he desired.

The Construction of the Russian Navy.

When affairs were settled he began to think seriously of building up

his Navy. By 1692, when he was only in his twentieth year, he had built quite a flotilla of small vessels with the assistance of the Dutch. In the following year he went up to Archangel and built a sizeable man-of-war there, going to sea in her himself in bad weather and learning all that it was then possible for a monarch to learn of sea-going conditions. He immediately dreamed of making Russia a naval power, the more so as he saw that by this means he could take full advantage of the weakness of Sweden, and his intentions were confirmed by his experiences in the campaign against the Tartars and Turks in 1695. Before the winter was over he had a fleet of galleys in the Sea of Azof and in this he was content to serve as the commodore in charge of the van. The operations of this flotilla made a big difference to the campaign and having conquered the Sea of Azof he immediately dreamed of the supremacy of the Black Sea, a dream that he had to abandon for the time in face of very sharp reverses. He then determined on his famous tour of investigation, a tour which took him to Holland, Germany, England, France and Austria, and which was interrupted when he was on the way to Venice to study the construction of galleys by the news that part of his army was in revolt. He hurried back and although the worst of the trouble had been overcome before he arrived the manner in which he stamped out the embers showed the Russians the type of man they had to deal with in the Czar.

The Russo-Swedish War.

Peter the Great from boyhood had dreamed of leading a crusade against the Infidel, combining his religious enthusiasm with a desire for the greater part of the Sultan's territory on the Black Sea, but he soon found that this was not practicable. Things were very much more promising in the Baltic, where the Swedes were exhausted from the wars of Gustavus Adolphus and the kings who followed him. The Poles and Danes were quite willing to help him in his desire to take a large part of Sweden's territory, naturally at a price, and he quite saw his way to use them, although whether it was their way was another matter. Accordingly Peter engaged a number of Dutch and British officers and trained seamen, and also a number of master shipwrights whose first efforts were to build a big fleet on the Volga. This proved a mistake in many ways and the greater number of the ships could not reach Lake Ladoga, on which they were designed to concentrate. Another attempt was made in a more convenient situation, and this fleet was the one that in 1703 took the port of Nyenskans from the Swedes. Reckoning that the Czar had no sea forces, the relieving Swedish squadron took no special precautions and suffered accordingly. They had put up a gallant defence, however, and Peter immediately set about persuading their leader Charles Van Werden to enter his service and eventually promoted him to be one of the principal officers in the Russian Navy. With this encouragement he prepared for bigger things, and in 1705 quite a number of small frigates, mounting between twenty and thirty guns apiece, were built on the Neva. The war with Sweden dragged on and

the great victory of Poltava gave the Czar a decided advantage, but it also gave him such an idea of his own prowess that he was easily out-generalled by the Turks on the Pruth and was compelled to sign a humiliating peace with the Sultan by which he abandoned all pretensions to naval power on the Sea of Azof. From frigates he worked to small line-of-battle ships until he had collected a very formidable fleet, for although manned very largely by foreigners his ships could not be lightly regarded on that account.

Hangö Head, 1714.

Numerous actions with the Swedes took place about this time, but the great naval action of the war was Hangö Head. The Russian Fleet was at Reval when news came that the Swedes had been seen at Hangö, their force consisting of sixteen men-of-war with frigates and small craft. The Czar reconnoitred the position in person and laid his plans so well that a feint of carting his galleys over a neck of land persuaded the Swedes to divide their force. He fell upon the main body and inflicted a crushing defeat. The action was principally an affair of galleys, but it was stubbornly contested and to Peter's credit it must be said that he took every care of the defeated leader and when he was released commended him to his Swedish master. A tradition of the time said that the Czar led the boarders in person, but this has been absolutely disproved. Numerous actions took place before the conclusion of peace in 1721, by which Peter realised his cherished aim of an outlet on the Baltic, this being really the starting point of modern Russia.

Swedish Shipping.

Nowadays the most important part of the Swedish merchant service is the carrying trade, and this was of importance right through the 18th century. During the first half the Swedes passed a law, modelled very much on the same lines as our own Navigation Acts of Cromwell's day, prohibiting foreign ships from entering Swedish ports with the goods of any other country than their own. One of the greatest figures in Swedish shipping at this time was Jonas Alstroner. He had his earliest experience in business as clerk to a Swedish merchant in London, but unfortunately his master failed, and about 1710 he had to start business on his own account as a shipbroker. It is rather curious to note what little difference there is in the root principles of his business in the 18th century and shipbroking as it is carried on to-day. At first he practised in various ports on the Continent, but in 1724, having by then prospered considerably, he determined to conduct his business from his own country, and accordingly he established himself in his native village. His interests stretched in various directions—wool, sugar, potatoes, dye works, tanning, steel and shipbuilding—but he always contrived to keep an eye on the foreign trade and to encourage Swedish shipping wherever it was possible. He was ennobled in 1750, and died in 1761, having left a mark on Swedish shipping that is still honourably acknowledged.

The Decline of the Dutch.

It will be remembered that in the middle of the 17th century Dutch shipping was more important than any other in the world, but their decline in the 18th was tragically rapid. At the beginning of the century their methods were far and away the finest in the world. Their shipping was completely registered and very thoroughly organised, while standardisation in shipbuilding was practised by them long before anybody else thought of it. It was principally in fishing craft, it must be admitted, but traders also were built to stock design with remarkable speed. As far as mechanical appliances and labour-saving machinery were concerned, they were far ahead of any competitor. The real ruin of shipping came with the Dutch determination to stick to free trade, on which they had built their prosperity, not even conceding any form of reciprocal duty against the goods of those who taxed theirs. It was first felt in the fishing industry, where the number of craft employed dropped from some thousands at the beginning of the century to only 160 in 1765. The whaling industry, which the Dutch had done so much to develop, was killed, while the numerous shipyards at Zaandam, which had been the finest shipbuilding centre in the world, collapsed one after the other. In the north Hamburg was squeezing Holland out of the carrying trade, and in the south Spain and Portugal came to a secret agreement in 1754 with the idea of ruining the Dutch without resorting to open war. It was impossible to keep a people of the energy of the Dutch out of trade, however, and although they could not engage in shipping, they turned to finance, and, taking their capital abroad, became the principal financiers of Europe.

French Trade.

The establishment of French overseas commerce had been one of Richelieu's first and fondest dreams, but he soon learned that his original system of granting monopolies to companies trading in home waters was hopeless. They took advantage of these monopolies in such a way that they soon became a danger to the State, and their privileges had to be revoked. He then framed a Navigation Act on very similar lines to the British, but Parliament revoked it before it could have any effect. Meanwhile, the French India Company had made considerable progress, and there was a big French trade in the Levant, so that he realised that he would have to build afresh from the foundations, and it was this building that first produced results in the 18th century. Whether it would have done so had not his successor, Colbert, elaborated his scheme, is an open question. By the end of the 17th century the trade of France was really established, Dunkirk specialising in trade with the north, Le Havre and La Rochelle with America, Nantes with Africa, Bordeaux with Spain, and Marseilles with the Levant, while St. Malo and numerous other towns busied themselves with fishing and fitting out privateers against the British whenever possible.

The Effects of a Disaster.

The French efforts to remedy the reverses of the Treaty of Utrecht by Law's financial schemes set back French commerce many years, but in the end they aided it, for a wave of emigration set in, and for the first time since Colbert's day proper attention was paid to the colonies. As the colonies developed, so did French trade, but it is highly doubtful whether it would ever have done so had it not been for the Government's unfortunate dabbling in high finance.

CHAPTER XXI

The First Revolutionary War

Howe as First Lord.

The first thing to be done after the Treaty of Versailles was concluded early in 1783 was to reduce the British Navy to a peace footing, and the man to whom this very unpalatable and unpopular duty was given was Lord Howe, who had made a great name for himself during the war, and who was appointed First Lord in January, 1783. Whether he was the right man for this work may be open to some question, and there was certainly plenty of criticism at the time ; but there is no getting away from the fact that the job was one that lent itself particularly to unfairness and corruption, and that neither of these charges could be laid at Howe's door. He was silent, ungracious and uncompromising, but he did his duty as he saw it, just as he tackled the tasks that were given to him during the American War, even when his sympathies were very different. His attitude is shown by his reply to a request for an officer to be transferred from one ship to another in order that he might be close to his home. "It is the first time I have heard of private convenience spoken about within these walls," he said, which shows what a big difference he had made to the Admiralty. The work was very distasteful to him, however, and in 1788 he obtained permission to retire, feeling that he could do it with a clear conscience.

The Mutiny on the "Bounty."

In 1788 an event occurred which drew attention to the state of the Navy and which has been discussed practically ever since. This was the mutiny on the *Bounty*. The *Bounty* was a small storeship of only 215 tons, which was employed to collect bread-fruit plants in the Southern Seas and take them into the West Indies, where it was considered that they would form a new food supply. She was commanded by Lieutenant William Bligh, a rough, "tarry-breeks" officer of the old school, who was a magnificent seaman but who was totally unfitted by temperament to have command of a King's ship. He was the bullying type that one reads about in Smollett and Marryat, and the way he treated his men from the very beginning of the voyage was scandalous and should not have been tolerated in a convict ship. Not only were the men shamefully ill-treated in the worst of weather, but Bligh proved himself dishonest as well, and took possession of property to which he



(Macpherson Collection)

THE MUTINY OF THE "BOUNTY"
(ENGRAVING BY AND AFTER R. DODD, PUBLISHED 1790)

The print shows Captain Bligh in his shirt-sleeves being pushed off in the boat in which he made his wonderful passage.



(Macpherson Collection)

PART OF THE CREW OF H.M.S. "GUARDIAN" ENDEAVOURING TO ESCAPE IN BOATS AFTER
COLLISION WITH AN ICEBERG
(ENGRAVING BY AND AFTER R. DODD)

In those days it was not by any means infrequent for ships to replenish their supply of water from an iceberg, a dangerous practice. Captain Riou got his ship and people to safety, whereas the boat parties suffered great hardship and some were lost.



(Macpherson Collection)

THE PORT OF TOULON, ABOUT 1776
(FROM A CONTEMPORARY ENGRAVING, BY LI GOUVZ, AFTER N. OZANNE)

Toulon has been the principal French naval port in the Mediterranean ever since the French had a Navy.



(Macpherson Collection)

H.M. PACKET " ANTELOPE " IN ACTION WITH THE FRENCH PRIVATEER " L'ATALANTE," IN THE WEST INDIES, DECEMBER 1-3, 1794

(FROM A COLOURED AQUATINT BY C. ROSENBERG, AFTER LIEUT. T. YATES, R.N., CONTEMPORARY)

The British packet ships were lightly armed and were not supposed to go in for fighting, but on many occasions they were able to give the French privateers a warm reception.

certainly had no right. Then he made the mistake of anchoring at Tahiti for several weeks, and the life ashore was in such sharp contrast to their misery afloat that when finally he weighed and commenced his old practices, the men were ripe for mutiny. Led by Acting-Lieutenant Fletcher Christian, a party of seamen who had been the particular mark of Bligh's ill-humour rose and seized the ship, securing the other officers. The mutineers did not ill-treat their prisoners in any way, and did not force any men to join them who were not willing, but the majority of the crew had already had such a bad time that they were willing enough, and it ended in Bligh and eighteen others being placed in the cutter with a supply of food, spirits and navigational instruments and left to shift for themselves. This treatment was in sharp contrast to the usual mutiny in those days, which was a most bloodthirsty affair, and also in very sharp contrast to Bligh's own treatment of his men. In commanding the boat he showed himself to be a magnificent seaman, and carried out the finest small boat voyage in the history of the sea. As soon as he reached home, by way of Batavia, the sloop *Pandora*, under Captain Edwards who was very much of the same kidney as Bligh, was sent out to search for the mutineers, who were expected to be in the Friendly Islands. Eventually thirteen mutineers were discovered at Tahiti, including some who had every claim to clemency. The manner in which Edwards treated these prisoners was a disgrace to the service and was downright torture. Christian and the other eight men had disappeared, and they were not discovered for many years afterwards. In 1813 Pitcairn's Island was visited by an American ship, who found the remnants of the mutineers and their descendants. They were later moved to Norfolk Island, which they still inhabit. Bligh was eventually promoted to flag rank, but all through his subsequent history, especially when he was made Governor of New South Wales, his brutality was his most conspicuous trait.

Riou in the "Guardian."

Another example of the Navy's magnificent seamanship, but displayed this time in more pleasing circumstances, occurred in 1789, when Lieutenant Edward Riou—Nelson's "gallant, good Riou"—was in command of the naval convict ship *Guardian*. Falling short of water, he lay alongside an iceberg to obtain ice that they could melt down, but unfortunately a wave carried the ship against a submerged hummock and smashed her rudder, as well as causing a leak. Immediately afterwards a gale sprang up and the ship was leaking badly in the very worst circumstances. Riou gave permission to as many men as desired it to abandon the ship, but he himself was determined to stick to her to the last, and many of his crew were willing to try their luck with him. One of the boats foundered and her people were drowned, while the other was picked up by a merchantman after her crew had suffered terrible privations. The captain in the *Guardian*, on the other hand, contrived to keep her afloat, although she was leaking like a basket and was only supported by the empty barrels in her hold. In this condition,

and with consummate seamanship, he contrived to sail her to Table Bay, Cape Colony, where he beached her, without having lost a single one of the men who had stuck to him and the ship.

The Personnel of the Revolutionary Navy.

In 1789 the French Navy was in a magnificent condition, and in the opinion of such an authority as Mahan was the most efficient of the day. Immediately after the Treaty of Versailles special attention was paid to gunnery and the training of seamen; nine big squadrons were kept in permanent commission and the Navy was in a position to send out expeditions of scientific value all over the world. The officers were, if anything, too homogeneous, for most of them were noblemen and preserved their caste in the service. On this account the Navy became suspect by the Republicans in 1790, for the officers did not join in the general enthusiasm for the Revolution. The Navy even refused to fly the Tricolour and stuck to the White Ensign under which they had fought so well, but finally conceded the point, flying the White Ensign with a small tricolour in the upper canton next the mast. Popular clubs were formed in all the naval ports and were soon at work against the Navy, but in spite of the fact that the Ministry did little to help them the officers remained firm, offering their allegiance to France just as they had done in the old days and taking little part in politics. Naturally, however, the discipline of the men soon began to break up and the noblemen began to emigrate, including many naval officers. By the law of April 29th, 1791, the old French Navy was entirely scrapped and replaced by a new organisation. The Officers' Corps was re-organised from truck to keelson. Hitherto the officers had been divided into red and blue, the former having passed through the cadet stage and being almost without exception of noble family, the latter being men promoted to the rank of sub-lieutenant and unable to go further. By the new law everybody who had put in four years' sea time, either in men-of-war or merchant ships, could sit for an examination to qualify for the rank of ensign, while men who had served before the mast for six years, of which only one had to be in a man-of-war, could be promoted without any examination. At the same time a large number were brought in from the Merchant Service. The result of this was to break up the old Officers' Corps altogether; in 1792 there should have been 640 officers at Brest, but the whereabouts of 250 of them was unknown. Soon afterwards the Republicans passed a law against the old naval officers, and all who could not hide themselves or escape abroad were imprisoned.

The Junior Officers.

The manner in which junior officers were found for the French fleet was even more scandalous. Up to the rank of lieutenant they were elected, without any reference to their professional ability, and when Monge was Secretary of the Navy and had to promote seventy officers to the rank of Captain he was forced to make his first selection

from the nominees of the political clubs. Ten was the quota granted to the Toulon Club, the worst of them, and all the nominees were of very doubtful efficiency. Finally the crew themselves had a good deal of say in the matter, and in many cases quietly disembarked the officers for whom they had no particular use.

French Naval Gunnery.

It was during 1792 also that the Republicans decided to suppress the magnificent corps of seamen gunners that had been specially organised in 1786 by Marshal de Castries. One can understand their objection to the naval officer on account of his loyalty to the old régime, but it is difficult to see why they disbanded this magnificent and useful corps, and moreover stubbornly refused to permit them to be reformed, replacing them in the Navy by ordinary sailors, most of whom had not even the qualification of full naval training, but had been brought in from anywhere. Admiral Martin's fleet at this time is typical. He himself was formerly a warrant officer who had been promoted above the heads of many others from a pilot of warrant rank. He had 12,000 men in his fleet, of whom 7,500 had never been to sea before, and in this connection it must be remembered that the real reason of many easy victories which were gained by the British lies in the fact that the French crews were too miserably seasick to make any defence. The early disasters of the Republican Navy caused the Convention to send down commissaries to conduct a full enquiry, and their verdict should be remembered by every maritime power: "Patriotism is insufficient to man warships."

The Outbreak of the Revolutionary War.

Britain had been nervous from the very beginning of the French Revolution, but in 1792 it became obvious that she was being dragged into an active struggle with the Republicans. Undoubtedly the fear that the revolutionary doctrines would be carried across the Channel had a good deal to do with the British attitude, but the war certainly would not have occurred had not the French decided in 1792 to annex the Southern half of the Rhine Delta and to seize Antwerp after the plans of Louis XIV. This was right against the existing Treaty, with the result that in the following year England joined the First Coalition which at that time consisted of Austria, Holland, Spain, Prussia, Portugal and Sardinia. British troops were sent across to the Low Countries, where they met with poor success, and it soon became obvious that it was upon the Navy that the country had to rely. There seemed to be little cause for anxiety on this score. The Peace of Versailles had left the fleet in a magnificent condition, and since then it had been maintained better than in any previous period of peace. Both in numbers and condition the British ships were superior to the French. As regard the personnel the situation was serious. The state of the French Navy in home waters has already been described. On the other hand on many foreign stations the ships were still maintained in magnificent condition, and the knowledge of the difficulties of their

country had bound the French officers and men together in a wonderful spirit of patriotism. As soon as war with Britain became inevitable the French rulers made every effort to bring their fleet up to a state of efficiency, but the difficulties were great and they made many mistakes before their aim was eventually achieved. With her Allies at the outbreak of war Britain had about twice as many ships available as France, and one of the first things to be done was to reduce the superiority by dividing or defeating these allies.

The First Fight of the War.

Hostilities actually commenced on January 2nd, 1793, when H.M.S. *Childers* was fired at by the forts at Brest, and soon decided that it was wiser to stand away. It was not until over four months afterwards that the first real fight took place, when H.M.S. *Iris*, a 32-gun frigate, met the *Citoyenne Francaise* of equal power in the Bay of Biscay. The Frenchman was superior both in weight of broadside and in crew, but after an hour and a half's stiff fighting, during which she sustained far more casualties than her British antagonist, she decided that she had had enough of it and made away, having previously crippled the *Iris* far too much aloft to permit of her considering a pursuit. This was the first of the numerous single ship frigate duels which were one of the most notable characteristics of the war.

The Channel in 1793.

At the beginning of the war, in addition to the considerations already mentioned, the hands of the Republican authorities were to a certain extent tied by the knowledge that there was a very strong Bourbon feeling in the country and that the Royalist *émigrés* were very ready to return in force at the first opportunity. This tied the available fleet to home waters instead of permitting it to cut up British commerce, as it would undoubtedly have done otherwise. Their Atlantic fleet was placed under the command of Vice-Admiral Morard de Galles, who collected it in Quiberon Bay. The British Channel Fleet was put under the command of Howe, whose policy of blockade was very much criticised. He maintained that a fleet had to keep its material in good condition, and therefore had as many ships as possible at anchor at Torbay with only a few frigates actually watching the French. His idea was that as soon as the French came out he would be in a position to meet them on equal terms instead of pitting worn-out foul ships against ships in the best of condition. The other school maintained that a blockade should be as close as possible, and that bad weather never hurt any fleet. Such men as Nelson, Jervis, and Duncan considered that the training that was obtained by constant sea time was worth any number of fast ships, and the Navy was inclined to agree with them. Lord Howe's policy, however, permitted the French Fleet to get back to Brest after having a mutiny off Quiberon, and certainly permitted a large number of ships to slip out and prey on British commerce when opportunity offered. Once or twice sections of the two fleets came into

touch but never into actual conflict, and both the Navy and the public got very restive under such conditions.

East Indiamen and the British Navy.

The East Indiamen had long been regarded as the reserve to the British Navy, but although they were frequently commissioned few if any of them were admitted into the regular service. In 1795, however, tonnage was so short that an exception was made, and several were purchased by the Navy. The best known of these is the *Glatton*, which was fitted out at Sheerness, armed entirely with carronades, 68-pounders on the lower deck and 42-pounders on the upper, 56 in all. Captain Trollope was given command of her, and she was sent down to patrol the North Sea, but before she had been long in commission she fell in with six French frigates, a brig and a cutter. The action started at ten o'clock on a July evening, the *Glatton* being surrounded and having to fight both broadsides at short range. The French attempted to board, but the 42-pounders on the upper deck loaded with grape caused terrible casualties, while the heavy guns on the lower deck smashed their sides. After a short action the French broke off the engagement, and the *Glatton* was far too much damaged aloft to follow them. Naturally enough the advocates of the carronade were very elated at this victory, but the experiment was not repeated.

CHAPTER XXII

St. Vincent and Nelson

Sir John Jervis in the Mediterranean.

Britain's prospects in the war did not appear to be bright when Sir John Jervis was ordered to the Mediterranean at the end of 1795, not as Second-in-Command, as had been intended before he was sent to the West Indies, but as Commander-in-Chief. His position was certainly a difficult one. France's Toulon fleet alone was as powerful as his, while in Spanish waters there were enough French ships to turn the balance decisively. The Spanish Navy was a powerful one, and although Spain had not yet definitely thrown in her lot with France, there were ample indications that French sympathy was growing in the Peninsula. Jervis had therefore to walk very warily, for a mistake or a rash act would have had disastrous effects upon British interests. But he was never a man to act rashly, and had none of Nelson's gift for taking chances. Of his subordinates Commodore Horatio Nelson was by far the most promising, and although the two men had little or nothing in common, they trusted one another implicitly and worked in perfect co-operation. He also had some very smart frigate captains, and the Mediterranean fleet was certainly at that time the most keenly efficient in the whole British Navy. For some months no very decisive actions took place, but in September, 1796, Spain definitely allied herself with France and signed a treaty of very explicit naval co-operation. Although this added very greatly to Jervis's difficulties, it did at least tell him exactly where he stood; but unfortunately just at this time he suffered from the actions of Rear-Admiral Man. Man had sailed east with Jervis with practically no stores in his ships, so that, when he could least afford to lose him, the Admiral had to send him back to Gibraltar to victual. His ships were urgently needed, and he had definite orders to rejoin his flag as soon as he had victualled. But instead of this he called a council of war as soon as he reached Gibraltar, and, deciding that the Franco-Spanish odds were too great, sailed straight away to England and left his Admiral to take his chances. Byng was shot for far less, but Man was merely told to haul down his flag. This defection, coupled with Napoleon's successful Italian campaign, forced Jervis to evacuate Corsica and finally to abandon the Mediterranean altogether, in spite of the great British interests that he knew to be at stake.

The Battle of St. Vincent, 1797.

Meanwhile Sir John Jervis in the South was waiting for the reinforcements promised from England. An accident to H.M.S. *St. George* reduced his fleet to ten sail of the line, but the arrival of Rear-Admiral William Parker brought it up to fifteen and sufficient frigates for his purpose. The Spanish fleet consisted of twenty-seven sail of the line, twelve frigates and numerous small ships, under the command of Admiral Don Jose de Cordova, and was under order for Brest to join the French and Dutch fleets for a grand invasion of England. In the meantime he was to call in at Cadiz to refit and victual his ships, as the dockyard at Brest already had its hands full. Jervis was ignorant of the fact that his enemy was to call at Cadiz, and in spite of the fact that he had a very much inferior fleet he determined to wait for him at Cape St. Vincent. As luck would have it, bad weather drove the Spaniards beyond their port, and they were sighted by Nelson in the *Minerve*, who immediately took the news of their presence to St. Vincent. Jervis, with his fifteen sail of the line, was ready for him. Calder, the captain of the fleet, presented his report as soon as they were sighted: "There are eight sail of the line, Sir John," and Sir John was very well satisfied. Presently he came back. "There are twenty sail of the line, Sir John." "Very well, sir," was the reply. "There are twenty-five sail of the line, Sir John." "Very well, sir." "There are twenty-seven sail of the line, Sir John." "Enough of that, sir. The die is cast, and were there fifty sail I would go through them." Whereupon Captain Hallowell, his flag captain, forgot all about discipline, and, slapping him on the back, cried: "That's right, Sir John, and by God! we'll give them a damn good licking."

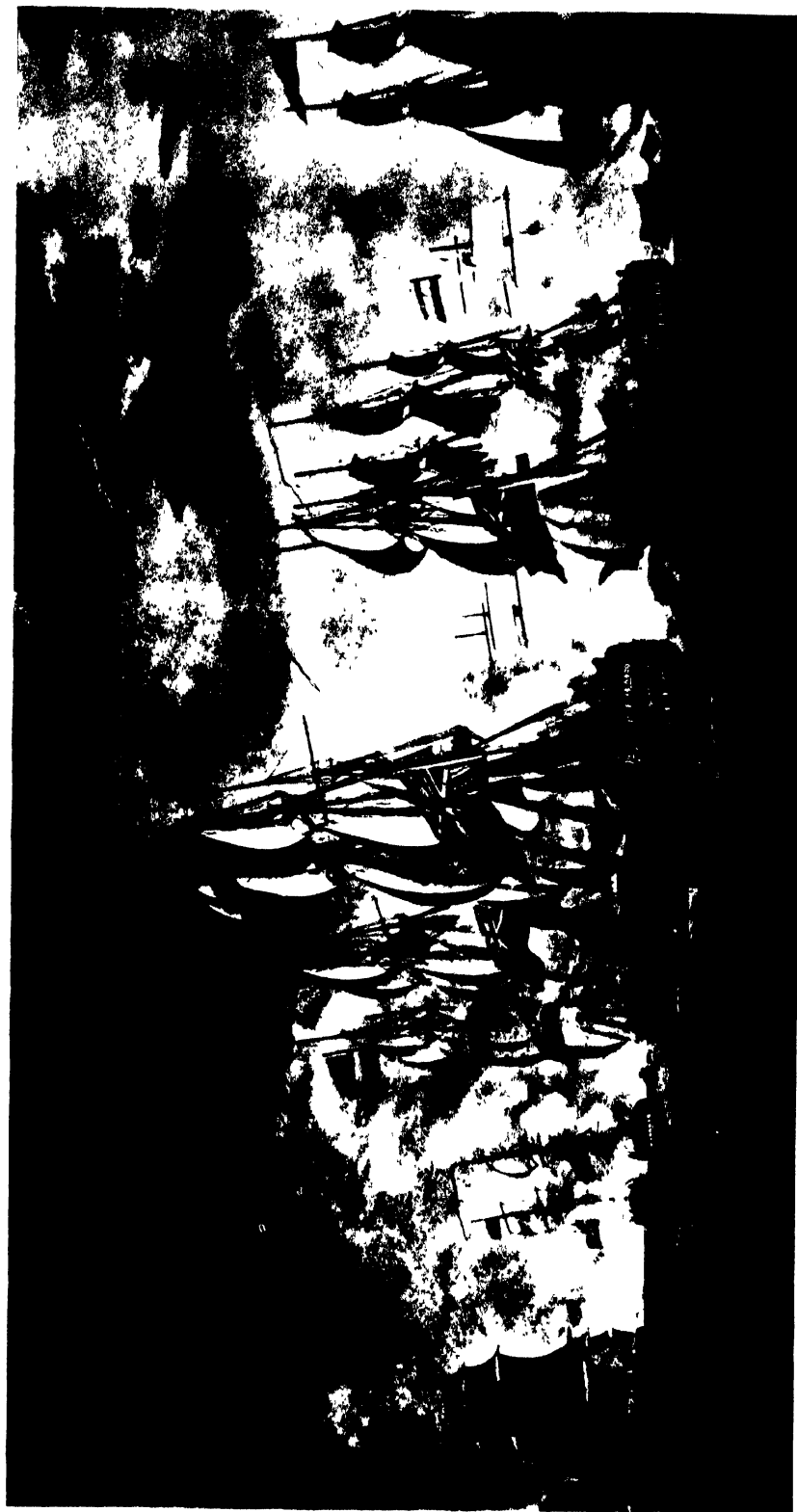
The Spanish fleet was in poor order, and before it could collect itself it had been cut into two distinct parts, eighteen ships in the one and nine in the other. Jervis turned on the eighteen to windward, leaving the leeward ships to wait, with the assurance that they could not make up to the assistance of their friends. The Spaniards were still superior by three ships, but Jervis kept himself in such a position that they could not join their friends. As the battle progressed, however, the head of the Spanish line got its chance of breaking away, and commenced to fly on the wind, but Commodore Nelson in the *Captain*, in spite of the very direct orders that he had received, threw his ship in front of the nine ships that were trying to escape, and was speedily joined by four others. It was another case of Nelson's genius for disobeying orders, but it was a moment of very great danger for him. The *Captain* was a 74-ton ship, but seeing the *San Nicolas* (80) foul of the *San Josef* (112) he immediately lay alongside her and boarded, being ably assisted by the detachment of the 69th Regiment that he had embarked as marines. The *Captain's* men soon had possession of the ship, but, not content with that, Nelson immediately led his boarders over her deck and on to the giant *San Josef* alongside her. This ship was already being battered by H.M.S. *Prince George* on the other side, and soon found herself compelled to surrender to Nelson's

boarders, who were in imminent danger of being killed by their friends' fire. This action was humorously described in the fleet as "Nelson's patent bridge for boarding three-deckers." At the end of the day the *San Nicolas*, the *San Josef*, the *San Ysidro* and the *Salvador del Mundo* were in British hands, while many of the surviving Spanish ships were in a very sadly crippled state. Next day the fleets were still in sight of one another, repairing damages, but the Spaniards had the wind and contrived to evade an action. As a result of this action Sir John Jervis was made Earl St. Vincent, with a pension of £3,000 a year, his subordinate admirals were made baronets, while Nelson was knighted, and had already been promoted to Rear-Admiral before the news of the action had reached home. It may be mentioned that on this occasion Lady Nelson wrote him saying that now that he was promoted, she hoped that he would not endanger his life by boarding, but would put the duty on to his subordinates, an instance of her misunderstanding of his nature which may go a long way to explain the subsequent differences between them.

The Mutinies at Spithead and the Nore, 1797.

At this time, when the situation on the Continent was still tense and when, in spite of the victory of St. Vincent, the position of Britain was still critical, the discontent in the fleet, which had been smouldering for years, broke out into active revolt. Although one cannot sympathise with the men for rising at that time, yet one cannot help blaming the authorities for the conditions that led up to the trouble. Early in 1797 a number of petitions were sent to Lord Howe from the fleet, but having examined them he decided, somewhat rashly, that they were all in the same writing and were not in any way representative, with the result that no notice was taken of them. When this was realised in the fleet at Spithead, preparations were made for a rising. When Lord Bridport ordered the fleet to sea on April 15th the whole fleet mutinied, put ashore such officers as were particularly unpopular and strengthened their position in every way. Vice-Admiral Sir Alan Gardner interviewed the mutineers, but unfortunately lost his temper, and narrowly escaped with his life. Realising by then that the matter was serious, Lord Bridport was empowered to inform the mutineers that a redress of their grievances had been granted and an amnesty. These grievances were very real, and showed that in many ways the fleet was in even worse condition than it was in the days of Charles II, and in very few cases had any real improvement been effected. Unfortunately the authorities were quite content to do things in their own time, with the result that at the beginning of May the seamen decided that they had merely been hoodwinked, and the mutiny was again active. On this occasion it was far more violent, and Lord Howe had to be sent down from the Admiralty with full powers to treat and grant what he considered wise. Lord Howe was so popular and so straightforward in his dealings that the fleet was immediately satisfied and put to sea again.

Meanwhile things were more serious at the Nore, where the



THE BATTLE OF ST. VINCENT, 14 FEBRUARY, 1797
(FROM AN AQUATINT IN COLOURS BY AND AFTER R. DODD, PUBLISHED JUNE, 1797)

(Macpherson Collection)

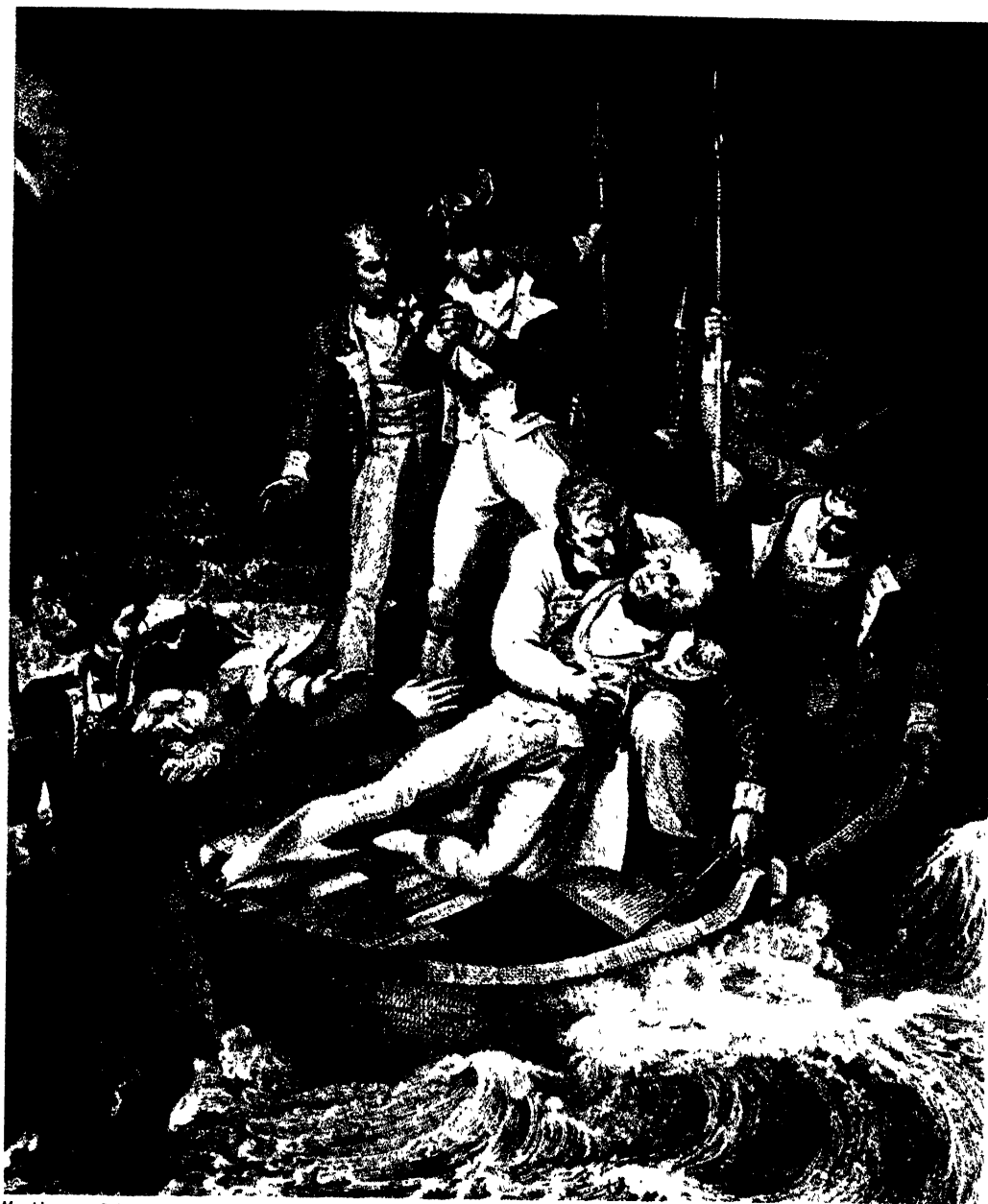
Fought against a superior Spanish force, the Battle of St. Vincent made the reputation both of John Jervis and Nelson.



(Macpherson Collection)

NELSON'S CONFLICT IN HIS BARGE WITH A SPANISH LAUNCH, CADIZ, 3 JULY, 1797
(ENGRAVING BY A. SMITH, A.R.A., AFTER R. WESTALL, R.A.)

In spite of his frail frame and poor physique, Nelson's courage was extraordinary, and he distinguished himself in more than one hand-to-hand fight.



(Macpherson Collection)

NELSON WOUNDED AT TENERIFFE, 24 JULY, 1797
(ENGRAVING BY J. NEAGLE, AFTER R. WESTALL, R.A.)

A shot in the right elbow during the unsuccessful attack on Tenerife caused the amputation of Nelson's arm



(Mucpherson Collection)

BEFORE THE BATTLE OF CAMPERDOWN; THE "ACTIVE," CUTTER, SIGNALLING TO ADMIRAL
DUNCAN IN YARMOUTH ROADS INTELLIGENCE OF THE DUTCH FLEET BEING AT SEA
(ENGRAVING BY E. DUNCAN AFTER W. J. HUGGINS)



(Macpherson Collection)

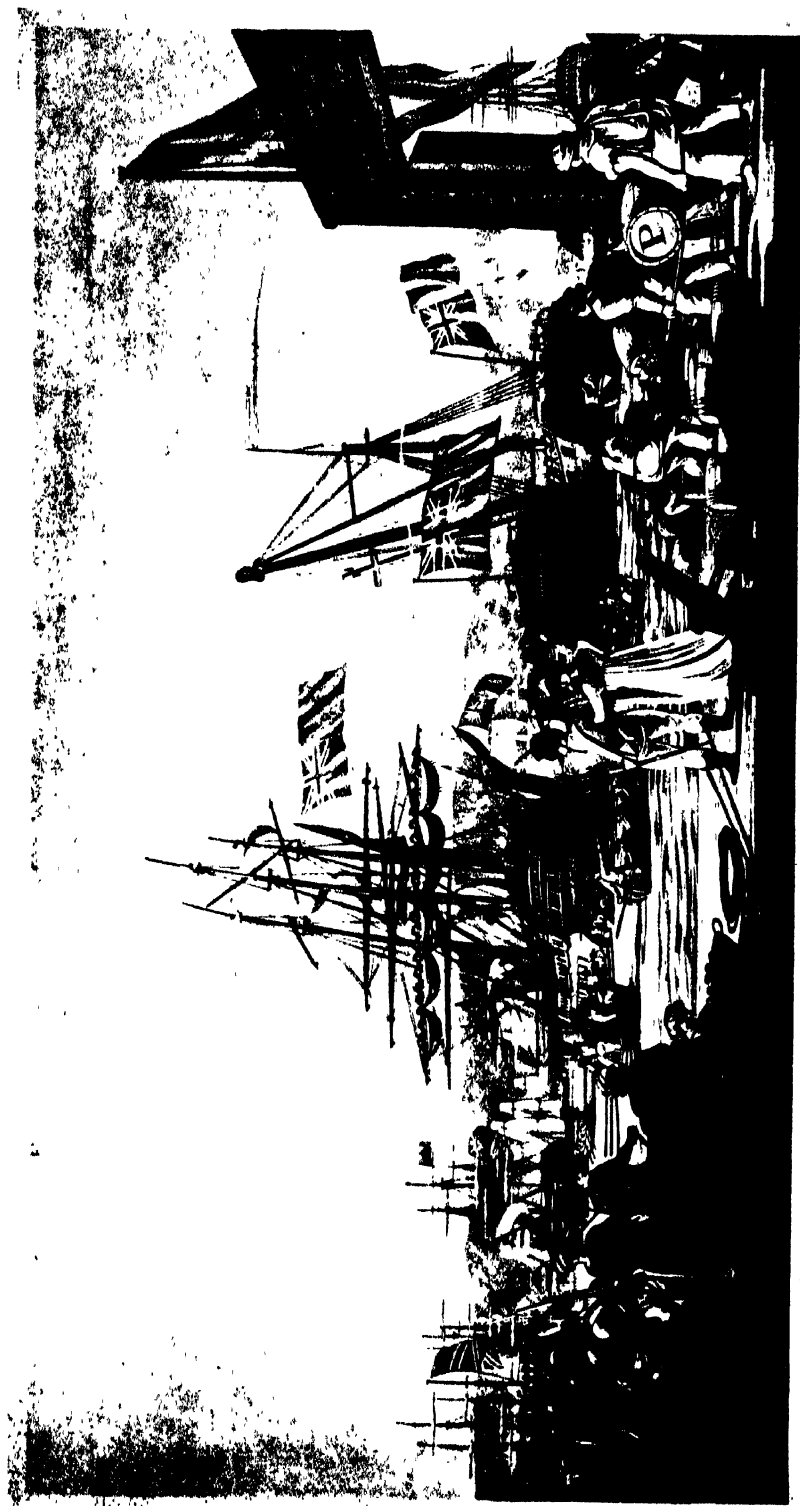
THE BATTLE OF THE NILE, 1st AUGUST, 1798—THE MORNING AFTER
(FROM A COLOUR AQUATINT BY AND AFTER R. DODD, PUBLISHED 1799)



(Macpherson Collection)

THE CAPTURE OF THE "GUILLAUME TELL," 30 MARCH, 1800
(FROM AN AQUATINT IN COLOURS BY J. WELLS, DRAWN AND ETCHED BY N. POCCOCK, PUBLISHED 1805)

The manner in which the French line-of-battle ship Guillaume Tell, one of the few ships that contrived to escape from the Battle of the Nile, attempted to force her way out of Malta, and withstood an attack by vastly superior forces, is one of the epics of the war



The H.M.S. 'Caesar' at sea, surrounded by several other ships, and the large structure in the background.

(Macpherson Collection)

H.M.S. "CAESAR" FITTING OUT AT GIBRALTAR, JULY, 1801.
(FROM ONE OF A SET OF AQUATINTS IN COLOURS BY H. & J. C. STODDART AFTER CAPT. J. BRENTON)

The energy of Saumarez and the affection in which he was held by the fleet permitted him to refit his ships in record time and



THE "LARK" 14-GUN LUGGER.
(FROM AN ORIGINAL ETCHING ON VELLUM BY ROSÉ)

The Lark took a gallant part in the Copenhagen operations. She is typical of the big three-masted luggers of the time, a type that was largely borrowed from the French.

mutineers were led by one Richard Parker, a man of education who had served as a midshipman, had been disgraced, and later pressed. His movement was frankly revolutionary, and for a time he blockaded London. After standing out for some time the great body of rebels finally surrendered on promise of pardon, until finally Parker and his few diehards were arrested. Parker was duly executed, but the others who were sentenced to death were pardoned after Camperdown, although many were flogged and others imprisoned. The improvements effected in the state of the seamen, however, were very great and tolerably permanent.

St. Vincent and the Mutineers.

Meanwhile, disaffected ships and men had also been sent down to St. Vincent's fleet, but he was not the man to tolerate mutiny for a moment, and immediately set about stamping it out. It began with an outbreak in the *St. George*, which was stamped out at once, and the Admiral was a little rash in congratulating the rest of the fleet on its fidelity. Within a few months it was obvious that the whole fleet were disaffected, and St. Vincent soon showed that he was not to be played with. H.M.S. *Marlborough*, Captain Henry Nicholls, joined St. Vincent straight from Spithead, where she had had a good deal of trouble, and a further outbreak occurred on the way out. The principal mutineers were court-martialled and sentenced to death, but Captain Ellison, who had replaced Captain Nicholls, was nervous of carrying out the sentences, and informed St. Vincent that he was convinced that the ship's company of the *Marlborough* would never permit a man to be hanged from their yardarm. The interview took place on the quarterdeck of the *Ville de Paris*, and the officers standing round, who knew something of St. Vincent's temper, were on tenterhooks as to how the interview would end. The Admiral listened very attentively and then replied: "What? Do you mean to tell me, Captain Ellison, that you cannot command His Majesty's Ship the *Marlborough*? For if that is the case, I will immediately send an officer who can." He would not entertain any suggestion for precautions, and finally delivered his ultimatum: "That man shall be hanged at eight o'clock to-morrow morning, and by his own ship's company; not a hand from any other ship in the fleet shall touch the rope. You will now return on board, sir, and lest you should prove unable to command your own ship, an officer will be at hand to you who can." The men understood this sort of treatment, and in due course the man was hanged, although the matter gave the captain and all hands in the fleet a good many anxious minutes before it was settled. When St. Vincent finally saw him run up the yardarm he turned to one of his officers with the quiet observation: "Discipline is preserved, sir."

Lord Howe.

"Black Dick," as he was invariably known to the lower deck, was born in 1726, the second son of an Irish peer, Viscount Howe. While still a youngster he started out with Anson in the *Severn*, but she did

not get round by Cape Horn, and so he did not have the advantage of the cruise round the world. He was then sent to the West Indian Station, where promotion was rapid owing to the climate, and his advancement was also helped by Court influence. His first command was the little sloop *Baltimore*, in which he served during the Jacobite Rising of 1745, and was badly wounded while tackling a superior French force. He was promoted to Post Captain next year, and the reputation that he had commenced to build up as a junior officer was steadily increased. He became an Irish peer in 1758, and four years afterwards was elected to Parliament. He saw considerable service in the Admiralty, and was in command of the North American Station when the War of American Independence broke out. A personal friend of Benjamin Franklin, he did all that he could to act as peacemaker, but his efforts were unavailing, and the entry of the French into the war kept him on the North American Station. He was nearly seventy when he won the battle of the Glorious First of June, having been created Viscount in 1782, and Baron and Earl six years later. He died in August, 1799, regretted by everybody who had ever come in contact with him, especially by the men of the fleet, who, although they recognised him as dour in the extreme, worshipped him for his justice and the fact that he never lost sight of their interests in favour of those who could help him more.

The Irish Rebellion of 1798.

Hoche's Irish invasion of 1796 had proved a failure, but the rebellion of 1798 appeared to be too good an opportunity to miss, and accordingly the French made full preparations to take advantage of it. There was a good deal of delay in fitting out the expedition, which, considering that the outbreak had been originally manœuvred from Paris, caused considerable ill-feeling in Ireland. But finally about 1,100 troops with a little artillery were despatched under General Humbert. A second expedition from Brest was to follow later. Humbert's army was landed in Mayo, and, the ships immediately returning to France, it was soon obliged to surrender. The second invasion was more formidable in character, including 3,000 troops and a considerable force of frigates under the command of Commodore Bompard. The British patrol was soon advised of the expedition, and Commodore Sir John Warren was away in pursuit. Warren's heavier metal forced five French ships to strike, the *Hoche*, *Embuscade*, *Foudroyant*, *Coquille* and *Bellone*, but the remainder escaped for the moment, pursued by the British as well as they could manage. In the end only three of the smaller vessels reached France again.

Nelson in the Mediterranean.

As soon as he had recovered from his wounded arm and the somewhat rough amputation that followed it, Nelson was sent out to rejoin St. Vincent, but immediately afterwards orders came for him to be detached to see what was going on in the Mediterranean, which had been abandoned by the British for some considerable time. With a small

squadron consisting of the line-of-battle ships *Vanguard*, *Alexander* (recaptured from the French), and *Orion*, and the frigates *Emerald*, *Terpsichore* and *Bonne Citoyenne*, he had quite a formidable little force, which was in the pink of condition. He soon received news that the French Toulon fleet of 15 sail of the line was escorting a huge body of troops across the Mediterranean, and it was left to him to guess that there was an Egyptian campaign in prospect. Meanwhile the British squadron had been crippled by bad weather, and had to refit in a hurry; but although it was obviously dangerous for him to risk meeting the French, Nelson pushed on and reached Toulon with three ships and a small sloop. St. Vincent, however, sent ten ships of the line to reinforce him at the earliest opportunity, but unfortunately did not know that Nelson had been separated from his frigates, so that he was greatly handicapped by the absence of scouting craft. Considering that his force was now sufficient, Nelson set out in search of the French, and learned at Naples that the enemy had gone to Malta. Before he could reach there he received news that the island had fallen, and that the French had sailed to the eastward. Guessing Alexandria as their destination, Nelson arrived there at the end of June, but, finding no sign of the French, he returned to Syracuse. It was here that he met Lady Hamilton, who rendered valuable assistance in obtaining stores for Nelson's fleet. There were again indications that the French had gone to Alexandria, so that, as soon as he was re-victualled, Nelson returned there. On August 1st, 1798, he reached the city and found it crowded with transports, but no sign of the French fleet, which, as a matter of fact, was at Aboukir Bay, some twelve miles away.

The Battle of the Nile.

Nelson had with him thirteen 74-gun ships, one 50, and a 16-gun brig; while the French fleet consisted of the famous *Orient* of 120 guns, three 80-gun ships, nine 74's and four powerful frigates, in addition to two brigs. Vice-Admiral Brueys, however, was not of the same calibre as Nelson, and anchored his ships in a single line in such a way that it gave poor possibilities of defence and gave the ships very little opportunity of supporting one another. The truth of the matter was partly that he was grossly over-confident, and paid for this confidence, and partly that the revolution had wrecked the fleet and he did not trust his men's seamanship. Nelson's plan was to attack the van and centre of the enemy in such a way that he could deal with the ships in series; and at the same time he gave instructions for his ships to prepare to anchor by the stern in order to prevent their being raked by the enemy. He attacked at sunset, but unfortunately H.M.S. *Culloden* stranded before she could get into position, and was lost to the fleet. The other ships attacked gallantly, and soon a tremendous action was in progress. Before the action had been in progress very long, the French flagship *L'Orient* caught fire, and the efforts of the British ship engaging her were centred on preventing the outbreak being suppressed. At about ten o'clock she blew up with

a colossal explosion, the burning fragments falling on a number of British ships round her and starting a number of smaller fires. The French ships put up a gallant defence, but were hammered into submission one by one, perhaps the most gallant action in the whole fight being that of Captain du Petit Thouars, of the *Tonnant*. First of all his right arm was shot off, then his left, and then one of his legs, whereupon he insisted on being placed in a tub of bran to staunch the bleeding, and continued the action until he fainted. By six o'clock in the morning the battle was over, and only four ships, under Rear-Admiral Villeneuve, contrived to escape, only to be captured by a British force a short time after the battle. It was one of the most complete victories ever known in the history of the sea.

Cochrane in the "Speedy."

One of the most remarkable figures at sea during this period was Thomas Cochrane, later to be Earl of Dundonald. He was born in Scotland in 1775, the son of the ninth Earl, and by keeping his name on the books of various men-of-war, he had contrived to pile up quite a big seniority before he actually joined the service in 1793. He immediately distinguished himself by his reckless courage, but at the same time he was not amenable to discipline and was always in hot water with his seniors. In 1798 he was tried by court martial for impertinence to the First Lieutenant of the line-of-battle ship in which he was serving, and was very lucky to get off with an admonition to be more careful in future. He was away with a prize when H.M.S. *Queen Charlotte* was destroyed by fire in 1799, otherwise he might well have been one of the many victims. Although he had done very well, professional intrigue got him appointed to the 14-gun brig *Speedy*, armed with 4-pounder pop-guns which were absolutely useless, instead of the very fine little corvette which he was expecting. That was in the beginning of 1800, and although he showed his contempt for his command by walking about with her entire broadside in his pocket, and although the only way he could shave himself in her cramped quarters was to stand up in his cabin with his head through the skylight while the mirror was propped up on deck, he was intensely proud of her, and immediately started to show what she could do. His first capture was a powerful French privateer, quickly followed by another, and then by a wonderful raid on the Spanish coast which cost them a large number of their merchant ships. Off Majorca at the end of the year he captured the 10-gun *La Liza*, but immediately afterwards he encountered the Spanish 32-gun frigate *El Gamo* and escaped by a stratagem, having shipped a Danish quartermaster and posing as a Danish brig, scaring the enemy off by asking assistance for the plague on board. By that time his crew had got so accustomed to his reckless gallantry that they were actually dissatisfied at escaping from such a powerful enemy, and he promised that the next time they encountered her they would fight. He then went on capturing enemy small craft, and made a wonderful name for himself.

CHAPTER XXIII

The Rise of Napoleon

The Resumption of the War, 1803.

It had long been obvious that the Peace of Amiens was nothing more than a truce, for the interests of Napoleon and Britain were diametrically opposite, and each was determined. It had been agreed that Britain should evacuate Malta and the adjacent islands, which should go to the Order of St. John of Jerusalem, and also that Egypt and the Ionian Islands should not be interfered with. They were, however, important for Napoleon's plans, and it was soon discovered that he was making preparations to bring them under French influence. In such circumstances Britain refused to evacuate Malta, on which Russia had her eyes, and Lord Whitworth, the Ambassador in Paris, left the capital. On May 18th war was formally declared against France, much to the disappointment of Napoleon, who had hoped to have until the autumn to complete his preparations. The Batavian Republic was then a part of France, and was included in the declaration.

Preparations for the Invasion of England.

Napoleon could ill brook the sight of his Brest fleet closely blockaded, and accordingly he made the utmost progress with his plans for invasion. The number of boats was greatly increased, and also quite a large fleet of regular men-of-war prepared. Large bodies of troops were drafted into the blockaded ships at Brest to be trained as marines, and the greater part of the fleet was sent out into the outer roads from the harbour. On July 25th, 1804, however, helped by a dense fog, part of the fleet did attempt to slip out, but, unfortunately for them, the weather cleared. They were immediately seen by the blockaders, who signalled their consorts and soon chased them back to port again. However, the men-of-war in the port were crowded with troops, and were held in readiness under Admiral Ganteaume to throw 25,000 French troops into Ireland or Scotland, preferably the former, and then to go north about to Holland to pick up the ships blockaded there and the transports that had been prepared. It was then estimated that they would have sufficient material to attempt the main invasion of England, but unforeseen circumstances prevented the fulfilment of this idea. In the meantime, Bonaparte had made himself Emperor, and had no intention of giving up his grandiose plan.

The Invasion Flotilla.

The force that was collected on the Channel coast for the invasion of Britain was a colossal one, at its height numbering well over two thousand ships. Nine hundred of these were specially designed transports, and a further seven hundred were gun vessels, rigged either as schooners, brigs or luggers. Most of the gun vessels carried an 8-inch mortar and three long 24-pounders, but some of the smaller ones carried only one 24-pounder and a field gun. For the conveyance of the horses a number of ship-rigged prames were built, each carrying twelve 24-pounders, and capable of transporting fifty horses. In addition, there were some four hundred *péniches*, schluyt-rigged galleys which were really hybrids of the Dutch and Mediterranean type, whose name was a corruption of the English "pinnacle." Practically all the ports and inlets of the coast were pressed into service for the accommodation of this flotilla, Vice-Admiral Bruix having his headquarters at Boulogne. Most of these ports were protected by natural defences of sandbanks, but still the British cruisers contrived to worry them considerably at every opportunity.

British Torpedoes.

The excellent defence put up by the French batteries forced the British to attack in another way, and accordingly the Catamaran was devised, very much on the lines of the American torpedoes that had been used in the War of Independence. It was made out of a 21-foot chest lined with lead, rather more than three feet wide and having the rough shape of a boat. It contained clockwork detonating machinery and about forty barrels of powder, being designed to float just awash. This machine was to be towed in by boats under cover of darkness and made fast to anchor chains in a tideway. The hope was that it would drift alongside the enemy ships and blow up after a predetermined interval. It was far more dangerous to those who tried to use it than it was to the enemy. The first attempt to employ them was in October, 1804, when they were scattered among a crowd of French small craft off Boulogne, in company with four fire ships. The fire ships expended themselves uselessly and only one catamaran did any damage, when it was being curiously examined by a number of French officers. The attempt, however, gave the enemy sufficient warning for them to protect their flotillas with a carefully designed arrangement of booms and chain cables, which effectively prevented such an attack being carried out again with any hope of success. After another unsuccessful attempt to use these machines, they were dropped by the naval authorities.

The Case of Commander John Wesley Wright.

One of the mysteries of France after the Revolution is the fate of Commander John Wesley Wright, R.N., a mystery that puzzled and infuriated Europe for years, and which is still a serious bone of contention. He was in command of the little *Vincejo*, a brig mounting eighteen 18-pounder carronades and manned by 75 hands altogether, 24 of them being boys. On the morning of May 8th, 1804, she was

becalmed at the mouth of the Morbihan, and while anchored there was attacked by six 3-gun brigs and eleven 2-gun luggers, carrying between 700 and 800 men. By means of springs to the cables, Commander Wright contrived to get his broadside to bear, and gave them a warm reception, but after two hours' fighting his ship was badly cut about aloft and leaking, several of his guns were out of action, and things were in a very bad way, so that he ordered his colours to be hauled down. Wright was imprisoned in the Temple at Paris, and shortly after Trafalgar he died in circumstances which at the time were generally believed to point to foul play. Napoleon protested that this was not the case, but the matter has been argued hotly ever since, and will always remain one of the mysteries of naval history.

The Attack upon the Spanish Treasure Ships, 1804.

The possibility of Spain coming into the war immediately aroused attention to the promise of rich Spanish treasure ships to be captured, and, with the traditions of the Tudors behind them, the British were not slow to take full advantage of these possibilities. A cruiser force under Captain Graham Moore, with his broad pennant in the *Indefatigable*, was sent out to intercept four Spanish frigates which were bringing the annual treasure from the River Plate. For a long time war had been regarded as inevitable, and the treasure which was pouring into the Spanish capital was immediately despatched to France against every obligation of neutrality, but it must be remembered that war had not yet been declared. The Spaniards were encountered on October 7th, 1804, and were in no way prepared for attack, but when they were summoned to surrender they stoutly refused and put up a gallant fight. One of them, the 34-gun frigate *Mercedes*, blew up with heavy loss of life, the *Clara* and *Medea*, of 34 and 40 guns respectively, surrendered, and the *Fama* (34) was overhauled and overwhelmed in making an effort to escape. There was a very heavy loss of life in the *Mercedes*, including a large number of women and children who were taking their passage, but the booty gained was reckoned as being worth a million pounds sterling.

The Wreck of the "Minerve."

The work of blockading the French Channel coast in all sorts of weather was such a trying one that it is very surprising that more British ships were not lost; as it was there was a considerable casualty list. One of the principal was the 38-gun frigate *Minerve*, a French prize, which, in blockading Cherbourg, stranded on one of the stone cones which had been erected as a first step to the construction of a breakwater. When the fog lifted, the unfortunate frigate was well within the range of the French batteries, but Captain Jahleel Brenton did not lose his head. He actually sent his boats in to cut out a French vessel which was close under the batteries, and which appeared suitable to carry out a bower anchor, while other boats harassed the French gunboats with their carronades. The work of getting out an anchor and kedging

a frigate off to it was not easy in the best of circumstances, but with two French brigs hammering away from a position in which they could not be touched by any of the frigate's guns, it was awkward in the extreme. In spite of this, however, by ceaseless endeavours and magnificent seamanship, they contrived to get the *Minerve* off the breakwater, and were getting her away to sea when the wind fell and left her becalmed. Before she could anchor, the set of the tide carried her into the harbour and stranded her in a position where she could be pounded to pieces by the French batteries, and, after putting up with it for an hour, Captain Brenton finally struck. There arose a very pretty dispute between the French soldiers in the forts and the sailors in the gunboats and brigs, as to whom belonged the credit of the capture, but she was renamed *Canonnière* by Napoleon, which seems to have settled the dispute.

The End of 1804.

The end of the year 1804 therefore saw the British everywhere superior at sea, with the two main French fleets tightly blockaded and the Spaniards unable to render them any great assistance. Villeneuve had taken over his command at Toulon, but he had not shown any great haste to carry out the Emperor's instructions, while month after month the sea-wracked British ships maintained the monotonous blockade, keeping the greater part of the French navy bottled up, but being quite unable to cope with the swarms of small privateers which played sad havoc with British shipping, without, however, material difference to the general progress of the war.



(Macpherson Collection)

LOSS OF H.M.S. "VENERABLE" ON THE ROCKS IN TOR BAY, 24 NOVEMBER, 1804.
(FROM AN AQUATINT IN COLOURS AFTER PAINTING BY R. DODD, (CONTEMPORARY))

The maintenance of the blockade of the French coast involved the use of Tor Bay as a base to which the British Fleet might retire in bad weather, and several ships were lost.



(Macpherson Collection)

H.M.S. "VICTORY."
(FROM AN AQUATINT IN COLOURS BY DODD)

Although she was forty years old at the time of Trafalgar, the Victory was still regarded as the finest ship in the Fleet. The peak bow and thin bulkhead which caused so many casualties at Trafalgar are clearly seen in the print, which was published soon after that event



(Ua. pherson Collection)

NELSON WOUNDED ON THE DECK OF THE "VICTORY" AT TRAFALGAR.
(FROM A MEZZOTINT, 24½ in., BY J. WALKER AFTER J. ATKINSON, 1806.)

The engraving reproduced above is the rarest of the various prints depicting the great hero's last moments.



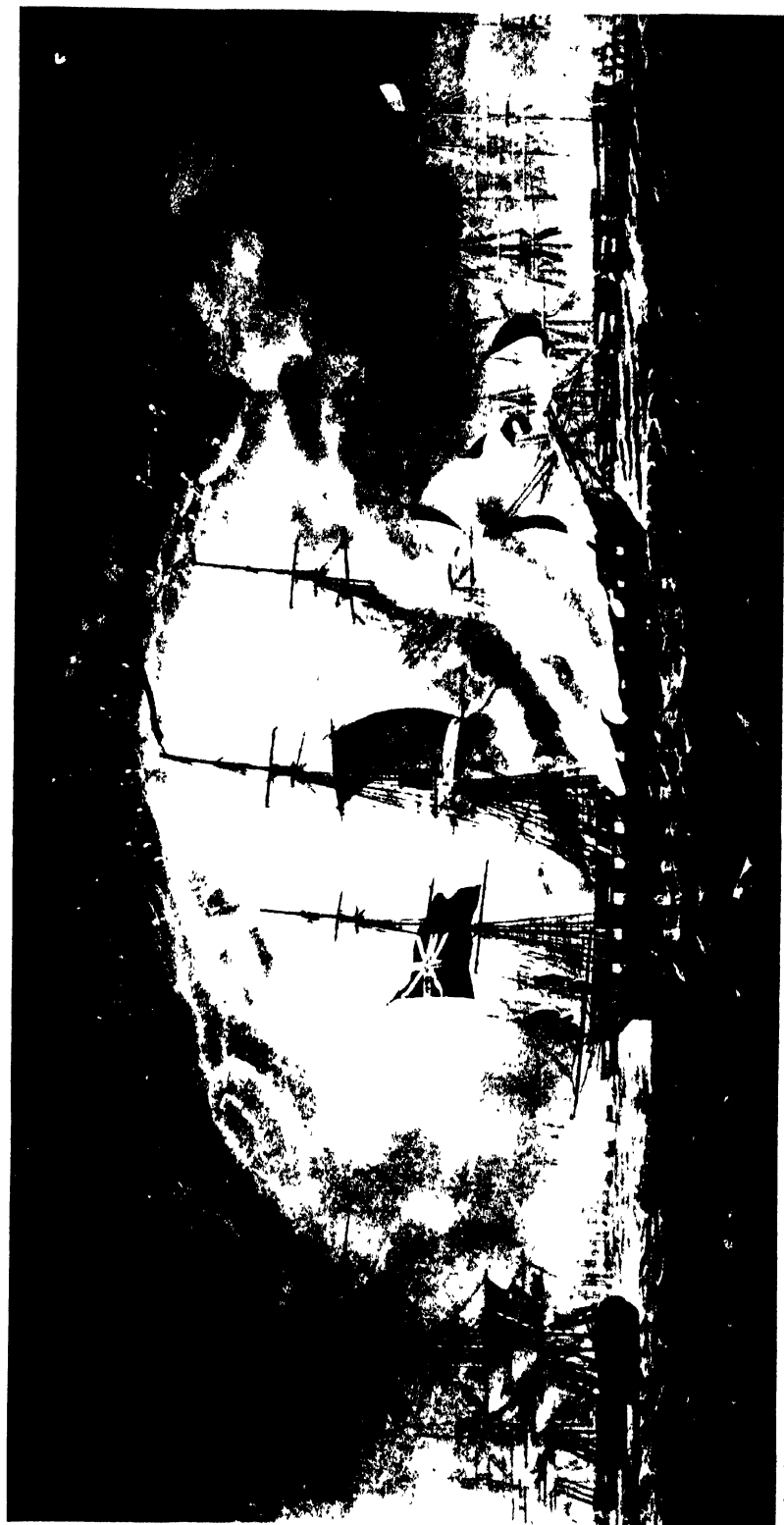
(Macpherson Collection)

THE BATTLE OF TRAFALGAR, 21 OCTOBER, 1805.
(FROM AN AQUATINT IN COLOURS BY JEAKES AFTER WHITCOMBE, PUBLISHED 1806)



TRAFALGAR: THE STORM AFTER THE BATTLE.
(FROM ONE OF A SET OF THREE AQUATINTS IN COLOURS BY HALL AFTER SIMES, PUBLISHED 1806)

*The tempestuous weather which followed the Battle of Trafalgar wrecked many of the prizes.
(From a Print lent by Messrs. T. H. Parker).*



(Macpherson Collection)

BRITISH FIRE-SHIPS ATTACKING THE FRENCH FLEET IN BASQUE ROADS, APRIL, 1809.
(FROM AQUATINT IN COLOURS, AFTER A PAINTING BY R. DODD)

In this action Captain Frederick Marryat, the novelist, distinguished himself.



(Macpherson Collection)

HORATIO, VISCOUNT NELSON, (1758-1805).
(FROM A PROOF MEZZOTINT BY BARNARD AFTER ABBOTT, PUBLISHED 1806)

CHAPTER XXIV

The Trafalgar Campaign

The Beginning of 1805.

Towards the end of 1804 the Spaniards had begun to take a very much more active interest in affairs, with the result that the British blockading force had to be considerably re-arranged in order to cover their fleet as well as the French. Ferrol and Corunna were watched by Rear-Admiral Cochrane with seven ships, although the force blockaded consisted of five French and seven Spaniards, with three more Spaniards nearly ready for sea. Sir John Orde was off Cadiz, where there was one French line-of-battle ship and seven Spanish ships ready for sea and four others practically complete. Orde also had to watch six Spanish line-of-battle ships in Cartagena, and Nelson was in the Mediterranean watching the Toulon fleet.

The First Sortie.

Napoleon, in Paris, was indignant at Villeneuve's inaction at Toulon, so that, on January 17th, 1805, the admiral was at last compelled to leave port. He had with him his eleven sail of the line and nine frigates and small craft, mounting 1,146 guns in all, while at that time Nelson had eleven sail of the line and two frigates, mounting 1,048 guns. In such circumstances it would appear that the French had a very good chance, for their ships were fresh and Nelson's worn out with their long blockade. By the time his frigates had discovered Nelson, the French had slipped through, and there followed a weary search through the Mediterranean. Port after port was searched for news of Villeneuve's fleet, and finally, being convinced by certain things that had been said by the Emperor that the fleet would make for Egypt, he turned his ships' heads thither, and cleared for action. He went first to the Morea and then on to Egypt, but there was no sign or news of the French, and he had to make his way back to his station. He then discovered that Villeneuve's fleet had encountered a gale in the Gulf of Lions two days after leaving Toulon and had been so damaged that four of his ships had to seek shelter as best they could and return to Toulon. Villeneuve's path was then clear, but he was not by any means certain of this himself and had a good many repairs to carry out before he could attempt another sortie, while his own taste was certainly against any possibility of meeting Nelson at sea.

The Real Sortie.

Meanwhile, Nelson saw that his best chance of bringing Villeneuve's fleet to action was to lead him to believe that his previous sortie could be repeated with impunity. Accordingly, he withdrew to the Gulf of Palma, after giving the French reason to suppose that he was off Barcelona. Acting on this information, the French fleet left Toulon on March 29th, and was sighted in what was practically a calm by the British frigates two days later. One of them went off to inform Nelson at Palma, while the other hung on to the skirts of the French as well as she could, only to lose them in the darkness. The French next appeared off Cartagena, but the Spanish squadron, under Rear-Admiral Salcedo, either was not ready to sail or else refused to help the French venture and Villeneuve was compelled to proceed without them. Believing again that the French would be making for Egypt, Nelson wasted time off the Sicilian coast, and it was not until April 9th that he made up his mind that they could not be steering east. He then learned that they had passed through the Straits of Gibraltar. He had already been ordered ashore by his doctor, for his health was far from good, but such orders were useless when the enemy were out and obviously on their way across the Atlantic. They had picked up reinforcements at Cadiz, compelling Sir John Orde to retire, and five Spanish line-of-battle ships and a frigate were a very welcome reinforcement. Although they met baffling head winds and calms, the allies had a big start of Nelson and made the most of it. Ganteaume sallied out to join them according to orders, but was overawed by the British fleet that he met and returned to Brest.

Nelson in Europe.

Nelson made his landfall at Cape St. Vincent on July 17th, and next day he fell in with Vice-Admiral Cuthbert Collingwood, with three sail of the line. It was not for several days that he received any definite news of the enemy, and he began to search the Eastern Atlantic for them again. On August 15th there was still nothing definite, when Cornwallis joined him off Ushant, and the combined fleet made for Portsmouth. When Nelson landed on August 18th, he had only been ashore once in well over two years, and this although he was supposed to be so sick that the doctors had ordered him to give up his command.

Cornwallis and Calder.

While Nelson had been pursuing Villeneuve, Cornwallis had been forced to leave the blockade at Brest owing to a breakdown of health, and, considering that he got his name of "Billy Blue" by his habit of keeping the Blue Peter ("ready to sail") flying at his masthead all the time he was forced into Torbay by stress of weather, this is not surprising. He rejoined it, however, while Nelson was in the west. On July 17th, 1805, the brig *Curieux* arrived at Plymouth from Nelson, giving Lord Barham at the Admiralty warning that Villeneuve was probably on his way back to Europe. Barham immediately ordered Cornwallis

to send Rear-Admiral Stirling, with five ships, to reinforce Vice-Admiral Sir Robert Calder, with orders to cruise to the west of Finisterre, while Cornwallis raised the blockade of Rochefort and cruised between Finisterre and Ushant. It was a big risk to take, for it permitted the enemy to slip out of the blockaded port, but nobody knew what Villeneuve would do in Europe, and Barham determined that he should be prevented from putting his big fleet at the disposal of Napoleon at all costs.

Calder's Action.

It was a great pity that at this point the British Navy had not the services of a tactician like Nelson instead of Calder. The two fleets met on July 22nd, 1805, when a sudden lifting of the fog revealed Villeneuve's fleet to Calder, making for Ferrol. But instead of the seventeen ships which he was supposed to have, and which Calder had to meet him, he had twenty-seven. However, he tackled gamely enough, although not skilfully, and succeeded in capturing the 74-gun *Forme* and the 80-gun *San Rafael*, both Spanish ships. Then the fog came down again and put an end to the action for the time being, the two fleets gradually edging apart, until the fog lifted and proved them well out of range of one another. Neither side seemed particularly anxious to recommence the action, so that Villeneuve succeeded in taking his ships into Vigo and then working up to Ferrol, the British by this time having several ships badly crippled. Although it was not a decisive victory, Calder must be given credit for having taken two units of a vastly superior enemy fleet, and does not deserve the censure that was heaped on his head, both officially and unofficially.

Villeneuve's Missed Opportunity.

After his action, Calder returned to Finisterre, hoping to meet Nelson on his way back to Europe, and then went on to Ferrol. A reconnaissance of the port convinced him that the main body of the French was not there, and he accordingly resumed the blockade with thirteen ships of the line. In the beginning of August four of these were detached to watch Rochefort, and it was then discovered that the twenty-seven allied ships under Villeneuve were at Corunna. Cornwallis detached Calder with eighteen ships, and it would have been a grand opportunity for the French admiral to have crushed the two British forces in detail, but he missed the opportunity. Ganteaume made ready to join him, but Villeneuve made no move, and, having a good many sick and wounded in his fleet, Ganteaume went on to Vigo. After making a belated and vain effort to join his friend, Villeneuve made his way to Cadiz. Collingwood was there with three ships, and naturally could not stand up against the big allied squadron, but, collecting a force, he returned to his station, and with a handful of ships he blockaded Cadiz and its thirty-five enemy ships. Villeneuve's orders had been to go to Brest or the Channel, and his action in making for Cadiz was not likely to be acceptable to Napoleon, who accordingly was not told where he was. When finally the Emperor did learn what had

happened he immediately sent orders superseding Villeneuve, but by that time he had sailed to his fate at Trafalgar.

The Allies at Cadiz.

Meanwhile, Collingwood off Cadiz had been reinforced by eighteen sail of the line under Calder, so that, although the allies still had a considerable superiority, there was at least a chance of a battle. On September 28th, 1805, Lord Nelson rejoined this fleet as Commander-in-Chief. In spite of his ill-health he was not satisfied to stay ashore while there was any possibility of engaging his old enemy, and naturally enough the Admiralty were very glad to have him back again. He brought with him some reinforcements, but the fleet was still lamentably short of frigates, and he only had two sizable ships to do his scouting.

The Plan of Action.

While waiting off Cadiz for the enemy to come out, and offering them every inducement to do so, Nelson drew up his plan of action for the battle which he felt to be imminent. It was not possible to carry this out in its entirety, for he anticipated that both his and the enemy's forces would be bigger than they actually were, but it contained the essential plan of tackling the enemy in two lines, his order of sailing being the order of battle. He reckoned that if the enemy's fleet should be seen to windward in line of battle, they would probably be so extended that their van could not succour their rear. He would therefore make the second-in-command a signal to lead his ships through about the twelfth ship from the rear, or wherever he could fetch if not able to get so far advanced. His own line would cut through their centre.

"I will suppose twenty sail of the enemy's line to be untouched. It must be some time before they could perform a manœuvre to bring their force compact to attack any part of the British fleet engaged, or to succour their own ships, which indeed would be impossible without mixing with the ships engaged.

"Something must be left to chance. Nothing is sure in a sea fight beyond all others, but I look with confidence to a victory before the van of the enemy could succour their rear, and then that the British fleet would, most of them, be ready to receive their twenty sail of the line or to pursue them should they endeavour to make off."

Should the enemy wait in line of battle to receive an attack from windward, the divisions of the British fleet would be brought nearly within gunshot of the enemy's centre. The signal would be made . . . "to set all their sails in order to get as quickly as possible to the enemy's line and to cut through, beginning at the twelfth ship from the rear. Some ships may not get through their exact place, but they will always be at hand to assist their friends." This latter plan was carried through in a manner which showed Nelson's virtue as an admiral, and his remarkable foresight, in an extraordinary degree. At the same time his kind-heartedness as a friend, often at the expense of the object directly in view, was shown by the fact that he detached the 98-gun ship

Prince of Wales, a line-of-battle ship that he could ill afford, in order that Sir Robert Calder might go back to his trial in England without indignity. A few frigates joined him, but still left the number quite inadequate, while ships had to be detached in order to fill up with water, which was generally the factor of radius in those days.

The Departure of Villeneuve.

Napoleon's order superseding Admiral Villeneuve had not arrived in Cadiz, but the previous one, insisting that he should sail at once, had, and with it came an indication of what was to follow. Villeneuve therefore hastened to obey, re-embarking the troops that he had landed when he arrived. As far as was possible the gaps in the French crews were made up with Spanish sailors, although as the feeling between the two allies was by no means cordial this procedure did not suggest very smooth working. They were ready to leave port on October 10th, but there followed a week of hard westerly gales which prevented any move, so that it was not until October 19th that Villeneuve and Admiral Gravina, in charge of the Spanish detachment, left Cadiz. Their movement was immediately reported to Nelson by the inshore squadron, although he had retired about fifty miles off shore in order to persuade the allies to come out.

The Battle of Trafalgar.

The Franco-Spanish fleet found considerable difficulty in working out of Cadiz and getting under way, so that Nelson, who expected them to go straight to Gibraltar and had sailed to cut them off there, found that he had arrived before they did, and accordingly doubled back, searching for them in the haze. Villeneuve had divided his fleet into five squadrons, but although he appeared to have foreseen Nelson's plan of attack remarkably clearly, he made little effort to check it. Captain Blackwood in the frigate *Euryalus* got into touch with the enemy at five in the evening of the 20th, and was given orders to keep in contact through the night. It was not until the early morning of the 21st that Villeneuve discovered that the British fleet was to windward of him and not to leeward, and also that it consisted of rather more ships than he had anticipated. When day broke the enemies were some eleven miles apart, and Villeneuve immediately began to change the order of his ships in order to leave himself an avenue of retreat to Cadiz. The result was that at ten o'clock his ships were still in considerable confusion, while the British were piling on all sail to attack. In order to divert the attention of the enemy from the flagship it was suggested to Nelson that the *Temeraire* should head the line ahead of him, and for a moment he consented, but as soon as she ranged alongside the *Victory* to take the lead, the Admiral seized a megaphone and hailed her with: "I'll thank you, Captain Harvey, to keep to your proper station, which is astern of the *Victory*." Soon after ten Nelson observed Villeneuve's manœuvre to maintain his retreat to Cadiz, and made his arrangements accordingly. About 11.40 everything was ready for the attack.

The Famous Signal.

As they rapidly approached the enemy fleet, Nelson turned to Captain Blackwood of the *Euryalus*, his intimate friend as well as his devoted subordinate, who was still on the quarter-deck of the *Victory* with him, with the remark: "I'll now amuse the fleet with a signal." Turning to Lieutenant John Pascoe, who was acting as signal lieutenant, he suggested "England confides that every man will do his duty." It was pointed out to him, however, that by slightly altering the wording he would make it very much easier to hoist, and accordingly it went up as

"England expects that every man will do his duty,"

and was greeted with a great burst of cheering, as it was repeated from ship to ship. He then hoisted signal No. 16 at the main

"Engage the enemy more closely"

and went into action with it flying. As Collingwood was Vice-Admiral of the Blue, in normal circumstances his line would have gone into action under the blue ensign, but in order to avoid confusion all the British ships flew the white ensign, which is now the Navy's flag entirely.

Breaking the Line.

As the two British columns approached the enemy, the weather or first column being headed by the *Victory*, and the lee by the *Royal Sovereign* under Collingwood, station keeping became almost impossible, and at the same time the long allied line bowed in the centre, so that the enemy could concentrate a heavy fire upon the advancing British divisions, a fire that caused the more casualties because at this time the ships were still built with the old-fashioned beak bow, surmounted by athwartship bulkheads of comparatively thin wood. Another cause of the heavy casualties was that the wind was light, so that not only were the ships slow in approaching, but the leading ships were left unsupported for an appreciable time. The *Royal Sovereign* was the first to reach the enemy's line, cutting it between the Spanish *Santa Ana* and the French *Indomptable*. Nelson watched the *Royal Sovereign* glide into the smoke and, turning to Captain Hardy, remarked: "See how that noble fellow Collingwood carries his ship into action." At the same time Collingwood turned to Captain Rotherham with the remark: "What would Nelson give to be here?" Nelson had kept his friend Blackwood, of the *Euryalus*, on board the *Victory* as long as he could, but as the flagship came within range he returned to his ship. At the gangway he took the Admiral's hand with: "I trust, my lord, that on my return to the *Victory* I shall find your lordship well and in possession of splendid prizes." "God bless you, Blackwood! I shall never speak to you again," was the answer. The *Victory* was taken into the thickest part of the enemy line, where the 120-gun *Santissima Trinidad* was supported by the French flagship *Bucentaure* and the smaller line-of-battle ships *Neptune* and *Redoubtable*. Before she got into action the *Victory* had sustained 50 casualties, but at half-past twelve she rounded under the stern of the *Bucentaure* and fired a 68-pounder

carronade loaded with a keg of musket balls into her cabin windows. As each gun came to bear it was fired, treble-shotted, into the French flagship, which, unable to bring any weight of metal to bear on this terrible raking fire, had twenty guns dismounted by the first broadside. As the *Victory* rounded up alongside the enemy flagship, their anchors interlocked and they were soon at it hammer-and-tongs. The British ship had the advantage of her guns being magnificently and coolly served, but the French flagship had some good marksmen with hand grenades and even small mortars in her tops, and did terrible execution on the *Victory's* exposed deck.

Nelson Wounded.

It was shortly before 1.30 that Nelson, who had steadfastly refused to cover up the stars on his coat, was hit by a bullet from the mizzen-top of the *Redoubtable*. Hardy was beside him when he fell, but was not in time to catch him. "They've done for me at last, Hardy." "I hope not," Hardy exclaimed. "Yes," he replied, "my backbone is shot through." The incident was witnessed from the deck of the Spanish flagship, which sent up a tremendous cheer, but in order not to discourage the *Victory's* men, Nelson threw his handkerchief over his face as he was carried down below, and laid in one of the midshipmen's berths in the cockpit. Dr. Beatty and the four officers who were there did their best for him, but he was convinced that he was mortally wounded; his legs were already paralysed and he was in agony. The bullet had entered at the shoulder and gone through the chest into the spine; there was no chance of his recovery. Dr. Alexander Scott, the chaplain, prayed with him and received his commands. "Doctor, I'm done," he said. "I have to leave Lady Hamilton and my daughter Horatia as a legacy to my country." There were renewed signs of fighting overhead, for the *Victory's* deck had been practically cleared and a handful of men from the *Redoubtable* had contrived to board. The possession of the deck was bitterly contested until the *Temeraire* ranged up on the other side of the Frenchman, who, after losing 522 of her crew of 645, was compelled to strike. The anxiety over, Hardy went down to the cockpit in response to his chief's message, and was immediately asked the progress of the battle. Twelve of the enemy ships had struck, but several fresh French ships were bearing down on the *Victory*. The concussion as one came alongside caused Nelson intense pain, and Hardy had to hurry on deck again. Again the dying Admiral spoke of Lady Hamilton and sent an affectionate message of farewell to Collingwood. Hardy came down with the news that the new attack was repulsed and fourteen or fifteen of the enemy ships had struck. "That is well, but I bargained for twenty. Anchor, Hardy, anchor." The captain asked whether Collingwood should not give the order and assume command of the fleet. "Not while I live, Hardy." Again he rallied. "Don't throw me overboard, Hardy. Take care of poor Lady Hamilton, Hardy, take care of poor Lady Hamilton." And then the final: "Kiss me, Hardy. Thank God I have done my duty!"

Nelson's Avenger.

It was Midshipman John Pollard, signal midshipman of the *Victory*, who is usually given the credit of having avenged Nelson. He and the signal quartermaster, King, noticed the damage that was being done by the soldiers in the *Redoubtable's* tops, and, taking muskets and a keg of bullets that had been left by the marines when they were ordered elsewhere, kept up a steady fire at these sharpshooters, until finally not one was left. After the action Captain Hardy congratulated the youngster warmly on having avenged the death of the Commander-in-Chief. It must be admitted, however, that there is some doubt as to the identity of the Frenchman who actually killed Nelson, many claiming the distinction after the battle.

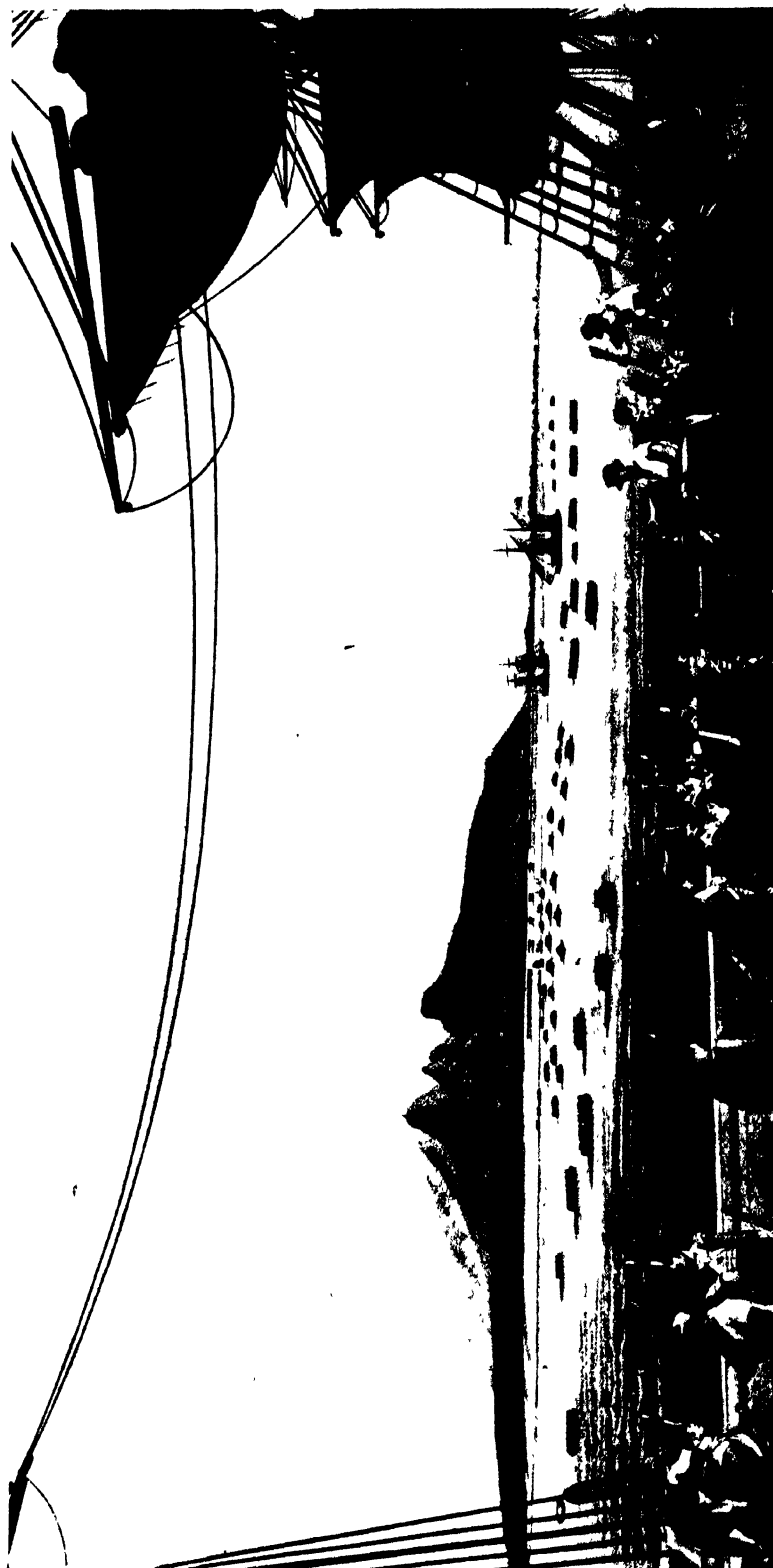
The Progress of the Battle.

The line being broken, the action speedily developed into a series of fierce yardarm-to-yardarm conflicts. The way the *Temeraire* saved the *Victory* by tackling the disengaged side of the *Redoubtable* has already been told, but no sooner was she there than the French *Fougueux*, thinking from her crippled state aloft that she was an easy victim, came alongside, and was received with such a broadside that she became unmanageable. As she fouled the British ship, she was immediately made fast and Lieutenant Kennedy boarded her and took possession with only a handful of men. The *Redoubtable's* main was then shot away and fell on the *Temeraire*, forming a bridge over which another party boarded and took possession. The French *Bucentaure* received broadside after broadside as different ships passed her, until finally she surrendered to the *Conqueror*. Admiral Villeneuve offered his sword to Captain James Atcherley of the Royal Marines, but he would not take possession, and eventually the French admiral surrendered to the First Lieutenant of H.M.S. *Mars*. H.M.S. *Bellerophon*, always a hard fighter, excelled herself in this action. At one time she was in action with the *Aigle*, *Monarca*, *San Juan Nepomuceno*, *Bahama*, and the French *Swiftsure* at the same time, the last-named not to be mistaken for the British ship of the same name. The *Aigle* was the closest and did very considerable damage, throwing shells and hand grenades into the *Bellerophon's* open ports. When Captain Cooke was shot by a musket ball, his first lieutenant, Tunby, fought the ship gallantly to the end. The *Bellerophon's* yeoman of signals, Christopher Beatty, was an old man, but when her ensign was shot away he climbed the mizzen rigging as coolly as possible, and, while the French marksmen held their fire in admiration of his bravery, he made fast a new ensign to the shrouds. With all her masts shot away and absolutely unmanageable, the *Bellerophon* remained at the end of the day firing at any opponent who ventured within range of her guns. Similar actions between single ships and groups were taking place all down the line of battle, but one after another the enemy ships were forced to strike or sheer off out of action.



(Macpherson Collection)

H.M. 18-GUN BRIG "RECRUIT" GALLANTLY RESISTING AN ATTACK BY A FRENCH 74 IN APRIL, 1809.
(FROM A CONTEMPORARY DRAWING BY W. TERRY)



(Macpherson Collection)

THE CAPTURE OF MAURITIUS, 1810.
(FROM AN AQUATINT IN COLOURS BY J. CLARK, AFTER H. TEMPLE, 65TH REGT.)

This print gives a view from the deck of the transport Upton Castle of the landing of the British Army as sketched by one of the officers taking part.



(Macpherson Collection)

H.M. 36-GUN FRIGATE "HEBRUS" CAPTURING THE 40-GUN FRENCH "ETOILE" OFF THE CHANNEL ISLANDS, MARCH, 1814.

(FROM AN AQUATINT IN COLOURS BY R. HAVELL, AFTER POCOCK, 1815)

After the action both ships drifted ashore but were saved.



(Macpherson Collection)

NAPOLEON GOING ON BOARD THE "BELLEROPHON" AT ROCHEFORT.
(FROM AN ENGRAVING BY JAZET, PUBLISHED "À LONDRES, CHEZ PALMER AU MUSÉE WATERLOO.")



H.M.S. "BELLEROPHON" IN TOR BAY, WITH NAPOLEON ON BOARD, 24 JULY, 1815
(FROM AN AQUATINT IN COLOURS BY CLARKE & DUBOURG AFTER A DRAWING BY CAPT. TOBIN, R.N., PUBLISHED 1 NOVEMBER, 1815)

While the Bellerophon was lying at Tor Bay with her Imperial prisoner it was only natural that she should be the centre of a huge fleet of sightseeing craft. The public reception of the Emperor was quite courteous and he reciprocated the feeling by appearing at the gangway and acknowledging the salutes of the sightseers. (From a print lent by Messrs. T. H. Parker)

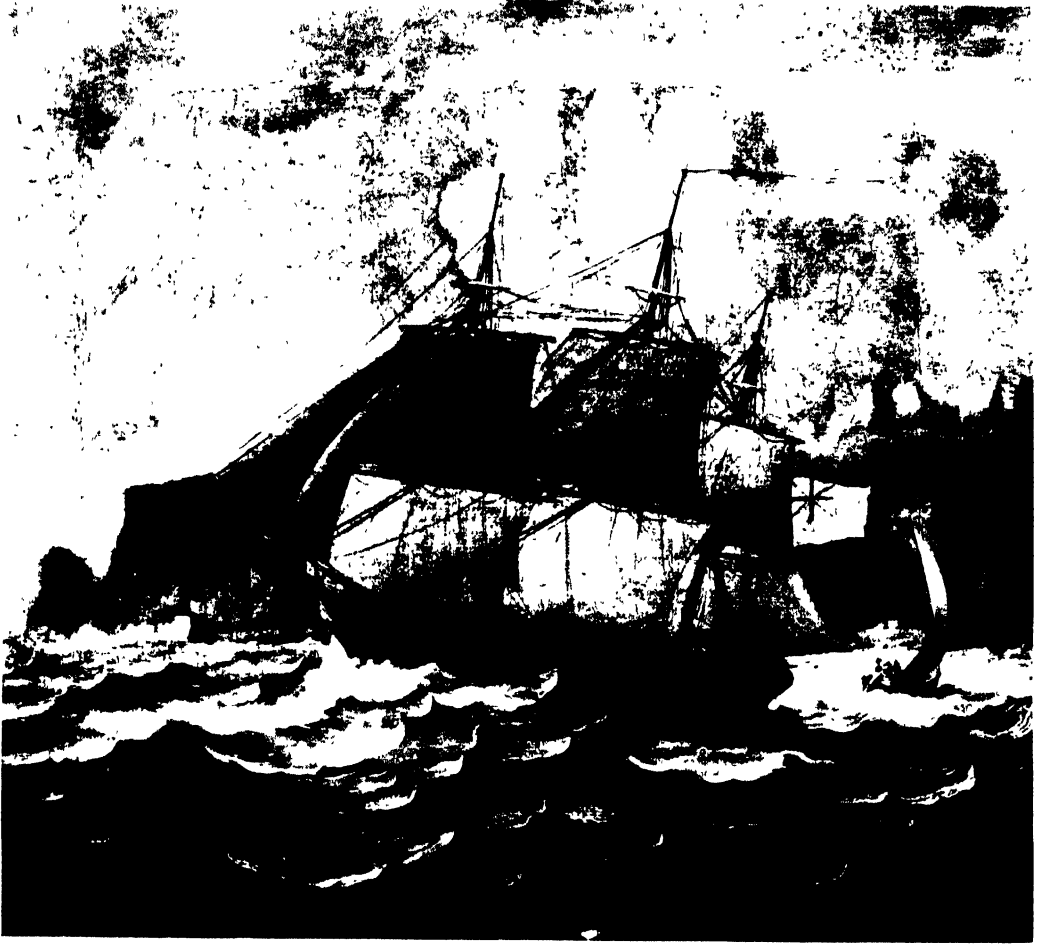


Geophysics Collection

THE ISLAND OF ST. HELENA

(FROM AN AQUATINT IN COLOURS BY CLARKE & HAMBLE AFTER BELLARIS, PUBLISHED 1806)

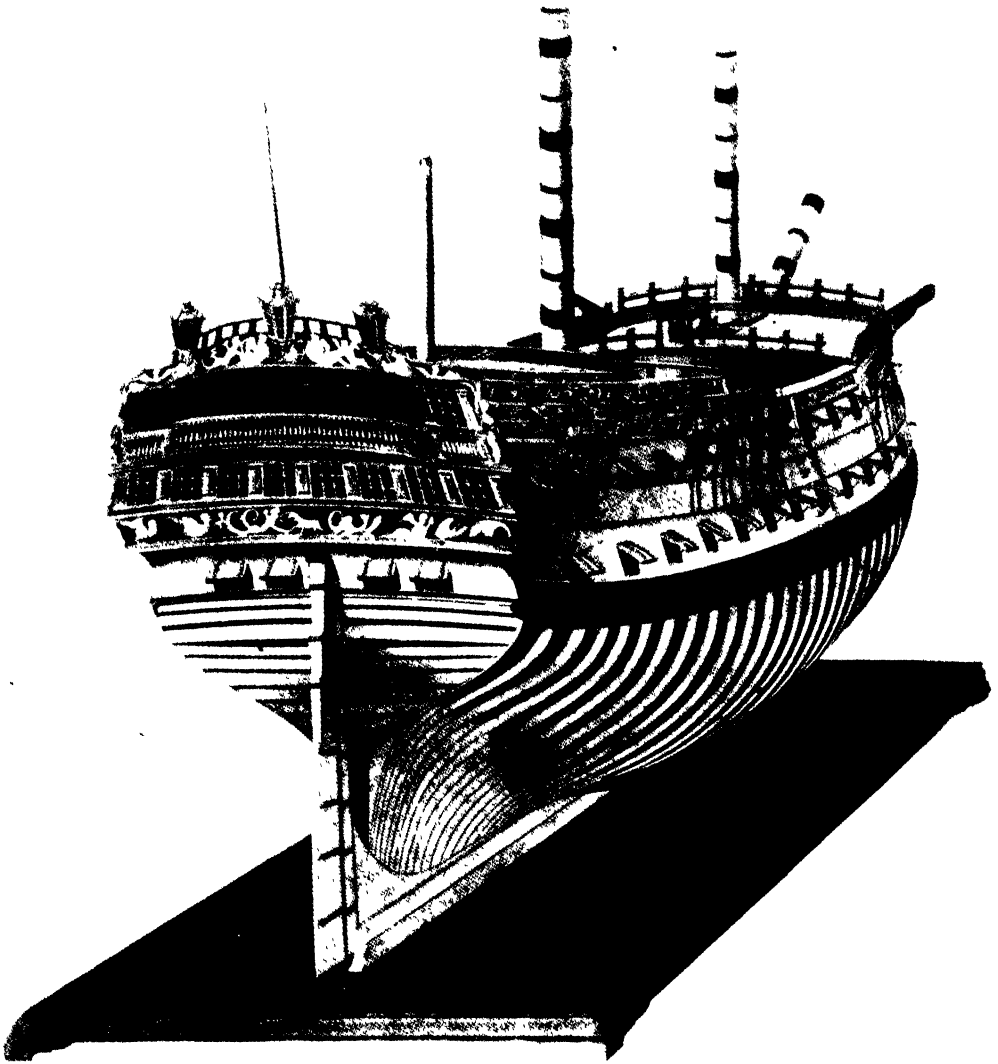
In 1806, the date of this print, St. Helena was the property of the East India Company and so continued until 1834.



(Macpherson Collection)

H.M. FRIGATE "LEANDER"
(FROM AN OIL PAINTING, ARTIST UNKNOWN)

A typical example of the heavier British frigates of the late eighteenth and early nineteenth century.



(Macpherson Collection)

MODEL OF H.M.S. "VALIANT," 74 GUNS, 1807-1823
(FROM AN AQUATINT IN COLOURS PUBLISHED IN 1814)

This model gives a good idea of the improvement of the under-water body in ships of this period.

The Remnant of the Allied Fleet.

When the battle was turning against the allies, Gravina, with the rear division, began to make the best of his way to safety. He has been bitterly blamed for this in French circles, but in extenuation of his desertion of the allies it must be remembered that Spain was forced into the war and had absolutely no heart in it. Then another five Spanish ships slipped out of the action and made to join him. The British ships to leeward could not prevent them, and they were soon joined by others. Eventually four ships under Dumanoir le Pelley got away, and eleven others followed Gravina towards Cadiz. The former division was encountered by a superior British force later on.

The Gale after the Battle.

It had been Nelson's intention to anchor immediately after the action, and he gave Hardy instructions to that effect, but, rather than hurt Collingwood's feelings, the captain referred to him and he promptly refused to do so. By the evening, however, it became obviously necessary, because there was a gale coming up from the southward. A good many of the damaged ships and their prizes were soon in trouble. First of all it was the *Redoubtable*, which had been hammered severely. The rising sea made it very difficult to get her people off, and a good many of them, together with eighteen British seamen, were drowned when she sank next day. The captured *Fougueux* drove ashore with heavy loss, the *Algesiras* and *Bucentaure* were both recaptured by the prisoners on board, the former getting into Cadiz and the latter being wrecked. On the morning of the 23rd a French squadron, under Commodore de Cosmao-Kerjulien, put to sea and contrived to retake the *Neptuno* and *Santa Ana*, but in doing so he lost the 80-gun ship *Indomptable*, and the *Rayo*, rolling out her masts, was forced to surrender to a smaller British ship. Other ships became unmanageable and were wrecked or else had to be scuttled by their captors, with the result that, of all the prizes, only the *San Ildefonso*, the *San Juan Nepomuceno*, the *Bahama*, and the French *Swiftsure* remained as trophies for the victors. Had Nelson's advice to anchor the fleet been taken, the result might have been very different.

The Fugitives.

Mention has already been made of the four ships that contrived to escape under Rear-Admiral Dumanoir le Pelley. The flagship was the 80-gun *Formidable*, and with her were the 74-gun *Duguay Trouin*, which should have been destroyed by Hood at Toulon in 1793 and which is still preserved at Falmouth, the *Mont Blanc* and the *Scipion*. On November 2nd they fell in with several British frigates, who informed Captain Sir Richard Strachan, who was in command of a fleet of four line-of-battle ships and four frigates. On the morning of the 3rd the two squadrons came into contact, and, after putting up a very gallant defence, the Frenchmen were forced to strike one after the other. Thus it came about that there was greater material gain from the minor action than from the great victory of Trafalgar.

CONQUEST OF THE SEAS

ftermath.

Nelson's request to Hardy that his body should not be thrown overboard was respected, and he was brought home preserved in spirits, to be given an impressive public funeral at St. Paul's. His request that the nation would take care of Lady Hamilton and his natural daughter, Horatia, was disregarded, and she was allowed to die in abject poverty, although it must not be forgotten that, had she been a little more prudent, she might have lived at least in comfort. His eldest surviving brother was made an earl, given a pension of £6,000 a year, and the sum of £108,000 for the purchase of an estate. His two sisters received £10,000 apiece, and Lady Nelson an annuity of £2,000 until she died in 1831. Collingwood was made a baron, and Hardy a baronet, all the flag officers and captains received gold medals, and a large number of lieutenants, especially first lieutenants who brought their ships out of the action, were promoted. A medal was privately struck for everybody who took part in the battle, but the Government did not issue one to anybody below the rank of post-captain until 1839. Villeneuve was released on parole and allowed to return to France in the spring of 1806, but a few days later, while at Rennes on his way to Paris, he was found dead in his room. It was officially stated that he had committed suicide, while enemies of Napoleon declared that he had been murdered. The wrangle over the circumstances of his death went on for years.

The End of the Invasion Plans.

Napoleon's plans for the Grand Army which he had collected to invade England had changed in detail almost from week to week, and when opportunity offered he had put the men to good use elsewhere. He had always hoped that he would have his opportunity of throwing them across the Channel, however, although he made the terrible mistake of imagining that he could do it if the British fleet were drawn away for twenty-four hours, forgetting the fact that it would still be "in being" and of the very greatest danger to him. As soon as Nelson cornered Villeneuve and his Spanish allies, however, the promise of these plans became dull; the result of Trafalgar made it impossible. A number of French ships were still in existence and liable to be very dangerous to British commerce and possessions, while the privateers still left the ports in swarms. But the danger of invasion, which was a very real danger for a long time and overshadowed everything else in England, passed with Trafalgar, although the army was not disposed of for some years.

CHAPTER XXV

After Trafalgar

Although the decisive victory of Trafalgar accounted for the main French fleet, there were still many enemy ships in existence, and these soon made their presence felt in spite of the close British blockade. It was also a disadvantage for the British that there was no great enemy to tackle, for this was the greatest incentive to keenness, and the weary blockade and constant pursuit of elusive privateers were but poor substitutes for the possibilities of a great fleet action. The commerce of France was crushed entirely, but she still held the interior lines and was to a very great extent self-supporting.

The Operations Against Java, 1811.

At this time Napoleon was credited with a plan of raising a huge navy to sweep the British out of the East Indies, and Admiral Drury was getting things ready for him out there by taking possession of as much territory as he could cover. Unfortunately, he died before these plans could be carried into effect, although by that time they were complete in every particular and everything was ready to be handed over to Captain Christopher Cole, who was well worthy of the trust. The expedition was prepared at Madras and sailed in April, 1811. They reached the Javan coast in June, to discover that the local force had been doing good work while they were on the way. Of these operations the most remarkable was Lieutenant Edmund Lyons's work at Marrack, which was regarded as the finest harbour in Java and absolutely unassailable. Quite a big expedition had abandoned the attack previously, but Lyons, with two ships' boats, actually captured the principal fort in the place, and, although he saw that he could not hold it against superior forces, he persuaded the enemy to make some very expensive attacks before he slipped away with only four men wounded. Unfortunately, the action was carried out without orders, to say the least of it, so that Lyons was not promoted, as he would otherwise have been, for his gallant exploit Batavia was captured without very much opposition, but when Rear-Admiral the Hon. Robert Stopford arrived he found that there was still some hard fighting before the operations ended in success.

Napoleon at Elba.

After the defeat of the Emperor and the taking of Paris, Louis the

XVIII crossed the Channel to take possession of his kingdom in the British yacht *Royal Sovereign*, escorted by the British frigate *Jason* and the French *Polonais*. A few days later, H.M.S. *Undaunted* embarked Napoleon at Fréjus and took him to Elba, a little island which had been granted to the ruler of Europe as a petty kingdom by the cynical confederation of the conquering powers. Such an action was calculated to cause trouble, and cause trouble it did. While the Emperor was on the island an Anglo-French patrol was maintained, the French ships being the *Fleur de Lys* and *Melpomène*, and the British the brig *Partridge*. The last-named was away from her station at the time when rumours began to gain publicity that Napoleon was going to attempt an escape. For weeks his agents in France had been getting the ground ready for his landing, and his final action was taken on the intimation that certain Royalist assassins were being sent out by Louis XVIII to put an end to the Napoleonic danger once and for all. He embarked in the little brig *Inconstant*, 300 tons, normally mounting 18 guns but fitted with 26 for the venture. She had been specially painted to look like a British ship, and was accompanied by the smaller *Etoile*, *Caroline*, *Manche*, *Abeille*, *St. Joseph*, and *Saint Esprit*, together with two transport barges. In all this little fleet carried 1,100 odd men. As soon as the die was cast, Napoleon manned the forts and prevented any spy leaving the island; one who did make the attempt very nearly lost his life. Napoleon made it very clear that he did not want to go to war with England again, and his great dread was meeting H.M.S. *Partridge*; the French Royalist ships he was quite willing to fight.

The Hundred Days.

Although the whole of France rose to Napoleon's standard, there was not time before the disaster of Waterloo to get the fleet under weigh, and for the precautions which the British took in appointing Lord Exmouth to be Commander-in-Chief in the Mediterranean, and Lord Keith in the Channel, with the reinforcements of all the naval stations, to be utilised. After Waterloo Napoleon made an effort to slip across to the United States, but this was found to be hopeless and accordingly he surrendered to H.M.S. *Bellerophon*, under the command of Captain Frederick Maitland, in Basque Roads. He was taken to Plymouth, where shortly afterwards he was transferred to H.M.S. *Northumberland*, flying the flag of Rear-Admiral Sir George Cockburn, and in that ship was taken to St. Helena, where he arrived on October 16th, 1815, a conqueror who might have put all his dreams into effect had he only understood the real principles of sea power, and had he possessed the personnel at sea to fight his battles against heavy odds in the same way that his lieutenants did on land.

The Peace of Paris.

With the allied armies in possession of Paris, it was possible to dictate any terms, but the feeling was that the war was against Napoleon and that the Bourbon dynasty should be given every opportunity of

re-establishing itself ; accordingly the greatest moderation was exhibited. France had to surrender Tobago, St. Lucia, Mauritius, Rodriguez and the Seychelles, but otherwise all the colonies that had been taken from her by the British and allies were returned, on consideration of an indemnity of seven hundred million francs. Both of the principal combatants had been bled white by the terrible war, but Great Britain was in a far better position to re-establish herself, owing to the manner in which she had managed to maintain and increase her commerce. The British Navy in 1815 was undoubtedly stronger than it had been in the whole of its history, and the first thing that the authorities did was to discharge the men into the streets, with no better recompense than an official permit to beg.

CHAPTER XXVI

Exploration Under Difficulties

The Disaster to La Pérouse.

Immediately after the Peace of Versailles the French sent out an expedition under Jean François Galaup, Comte de La Pérouse, to discover the North-West passage from the Pacific side in the same way that Cook had attempted on his last voyage. He sailed from Brest with two ships, his flagship *La Boussole* and a second ship under De Langle called *L'Astrolabe*. His secondary instructions were to explore the North-West coast of America, the North-East coast of Asia, the Oriental countries and Australia. The attention of the French Government was being turned to trade and he had orders to investigate the possibilities of whaling in the South Seas and fur trapping in North America. He surveyed the Alaskan coast and was then driven by bad weather into the Pacific, going down past the Hawaiian Islands, discovering Necker Island, and then crossing to Macao. He then sailed through the Philippines and up to Japan, Korea and the Manchurian coast, where he did some particularly valuable work. In August, 1787, he discovered the straits between Saghalien and the northernmost islands of Japan, which still bear his name, and then went on to Petropavlovsk, where the authorities had already received instructions from the Empress Catherine to receive him kindly. From there he sent his records up to date to Paris overland and later sailed for the Samoan group. Here a number of his men were murdered. He then went on to the Australian coast, where he was well received by the English pioneers and wrote his last report to the French Government on February 7th, 1788. He sailed into the Pacific and nothing more was heard of him, in spite of the expedition under D'Entrecasteaux which went out to search for him, until 1826 when the wrecks of what must certainly have been his ships were discovered in the New Hebrides.

The First Settlement in Australia.

Prior to the War of American Independence it had been customary for the British Government to transport its convicted felons to the plantations of America, both on the mainland and in the West Indian islands. Naturally enough, the independence of the United States made this impossible, and an attempt to found a convict colony on the

coast of Africa ended in failure. Viscount Sydney, who at that time was the Colonial Secretary, therefore determined to plant a convict colony in New South Wales, and in May, 1787, the first convict convoy sailed. The flagship was the 20-gun sloop *Sirius*, and as whipper-in she had the armed tender *Supply*. The convict transports consisted of the *Alexander*, *Scarborough*, *Lady Penrhyn*, *Prince of Wales*, *Friendship* and *Charlotte*. There were also three store ships, the *Golden Grove*, *Fishburn* and *Borradale*. None of the convict ships was big, the largest was of 470 tons burthen, but into them were crowded 564 male and 192 female felons, with 10 officers and 168 men of the Royal Marines to guard them. The convicts had 13 children with them, while 40 wives of marines went too and 5 doctors. The expedition was under Captain Arthur Phillip, who had with him a commission as Governor of New South Wales.

Botany Bay.

Captain Cook's botanists had brought home such a glowing account of Botany Bay that the fleet had been ordered to establish itself there, but Captain Phillip was a practical man and he soon saw that it would be absolutely hopeless to attempt to found a colony in that district. The bay was shallow, there was no water, the shore was exposed, and everything was against the settlement, so that he very wisely determined to search the coast for a better position. He left the fleet anchored in the bay and proceeded on a tour of investigation with three boats. Before long he came across the inlet which Cook had named Port Jackson and had described as being only fit for boats. Phillip was not quite so ready to take things for granted, and accordingly went in himself to investigate, to discover one of the finest natural harbours in the world, Sydney. Here everything was in favour of the settlement, which was named after the Colonial Secretary.

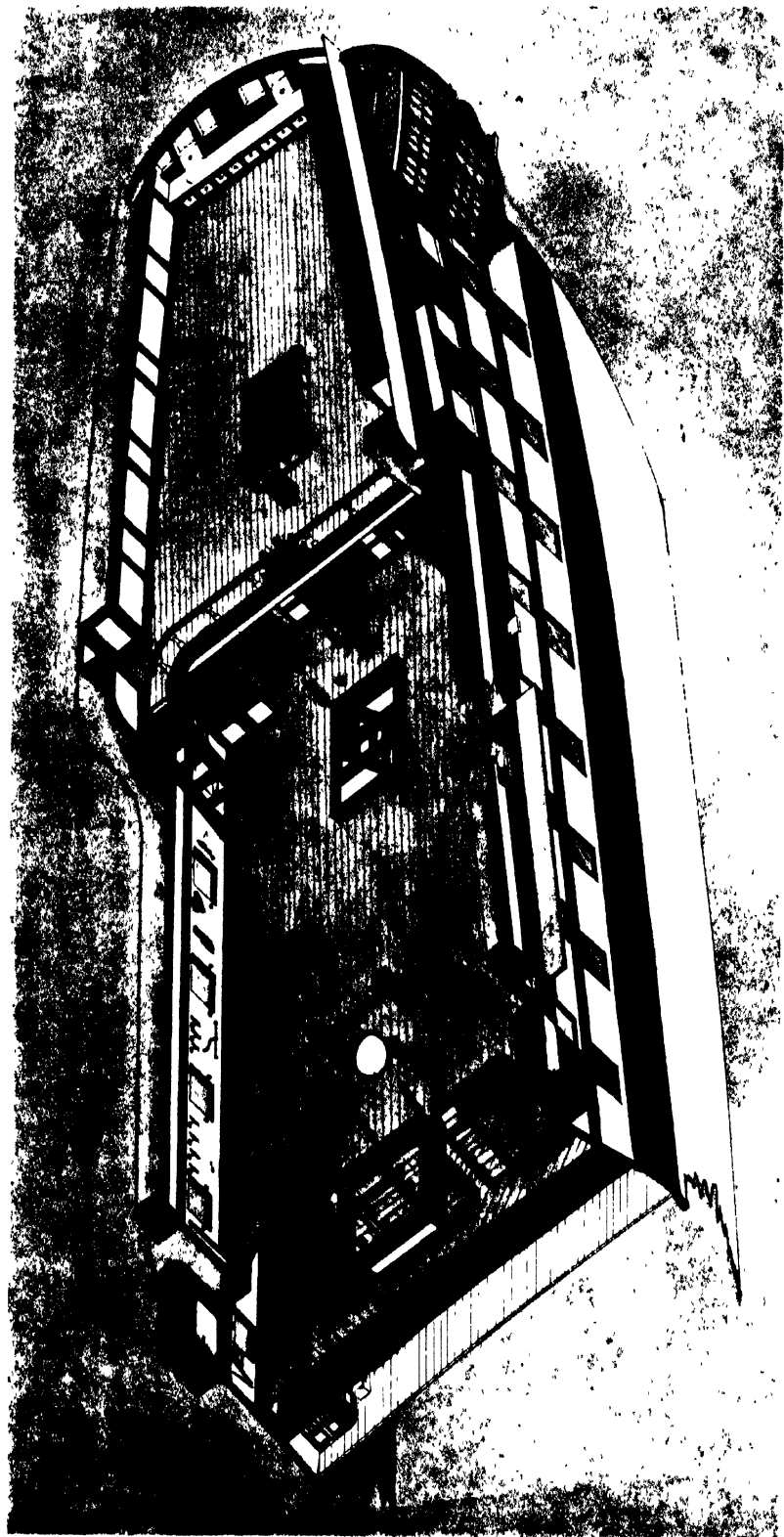
The Settlement at Sydney.

It is a curious thing that, although the continent of Australia is now one of the greatest wheat-producing areas in the world, experience has always shown that the neighbourhood of Sydney is not suitable for this grain. Things soon got very bad for the settlers, therefore, and the second batch of transportees came out when rations were very short for the pioneers. A certain amount of relief was found from South Africa and Batavia, but not enough, and the detachment would certainly have starved had it not been that a smaller party which had been sent to Norfolk Island had succeeded in raising a magnificent crop. Unfortunately, in attempting to reach it the *Sirius* was wrecked, so that things were still very bad for the colony when three further store ships arrived from home.

The Early Transportees.

It has often been thought that life in the new colonies was comparatively easy for the transportees, but, as a matter of fact, most of them preferred prison in England. The conditions on the voyage out

were terrible, for the Government paid as little as they possibly could for the convict ships, and, naturally enough, the tonnage that they obtained was valued accordingly. Of one batch of 1,700 sent out from England 200 died on the voyage, while a large proportion of the remainder were in a very sad condition when they arrived, so that a number of them died almost as soon as they landed. The work ashore was arduous and ceaseless and a large number did their best to escape. Most of these refugees perished in the bush, for it was generally believed in the convict settlement that there was an overland route to China, but some of the better educated succeeded in stealing or building boats for themselves and reaching the Dutch colonies, when they were generally promptly sent back to Sydney. Had it not been that Captain Phillip was a magnificent man in every way, the colony would have perished almost before it was started, but his strength could not withstand the strain that was put upon it, and in 1792 he was forced to retire and return to England, where luckily his health recovered and he lived to a ripe old age. Australia is very properly grateful to her pioneer Governor.



(Macpherson Collection)

QUARTER-DECK AND POOP OF H.M.S. "CANOPUS"
(FROM A WATER-COLOUR DRAWING, c. 1800)

The Canopus, a prize taken at the Battle of the Nile, was one of the finest sailers in the British Fleet for many years afterwards.



(Macpherson Collection)

A BOMB KETCH IN THE SOUND
(FROM AN AQUATINT AFTER DOMINIC SERRES, R.A., PUBLISHED 1806)

The three examples of the same type of vessel show the peculiar rig necessitated by her armament quite clearly.

VOLUNTEERS.



God Save the King.

LET us, who are Englishmen, protect and defend our good
KING and COUNTRY against the Attempts of all *Republicans* and *Levellers*, and against the Designs of our NATURAL
ENEMIES, who intend in this Year to invade OLD ENGLAND, our happy Country, to murder our gracious KING as they have
done *their own*, to make WHORES of our *Wives* and *Daughters*; to rob us of our Property, and teach us nothing but the *damn'd Art*
of murdering one another.

ROYAL TARS Of OLD ENGLAND.

If you love your COUNTRY, and your LIBERTY, now is the Time to shew your Love.

R E P A I R,

All who have good Hearts, who love their KING, their COUNTRY, and RELIGION, who hate the FRENCH,
and damn the POPE,
T O

Lieut. W. J. Stephens,
At his Rendezvous, SHOREHAM,

Where they will be allowed to Enter for any SHIP of WAR,
AND THE FOLLOWING

BOUNTIES will be given by his MAJESTY,
in Addition to Two Months Advance.

To Able Seamen,	-	-	-	Five Pounds.
To Ordinary Seamen,	-	-	-	Two Pounds Ten Shillings.
To Landmen,	-	-	-	Thirty Shillings.

Conduct-Money paid to go by Land, and their Chests and Bedding sent Carriage free
Those Men who have served as PETTY-OFFICERS, and those who are otherwise qualified, will be recommended accordingly.

LEWIS: PRINTED BY W AND A LEE

(Macpherson Collection)

RECRUITING POSTER ISSUED ABOUT THE TIME OF
THE FRENCH REVOLUTION.



THE SAILOR'S FAREWELL.

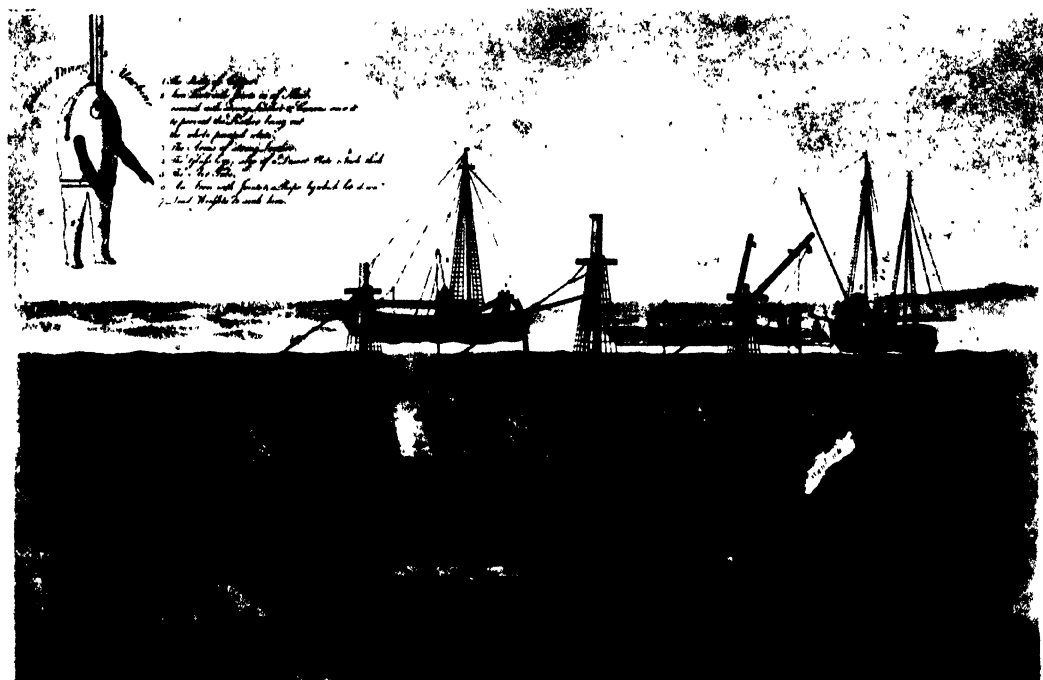
Macpherson Collection

THE SAILOR'S FAREWELL.

Pictures and prints like the above were very popular in England at the time of the Revolutionary Wars.



GREATHEAD'S LIFEBOAT GOING OUT TO A SHIP IN DISTRESS.
(FROM A PRINT PUBLISHED IN 1803)

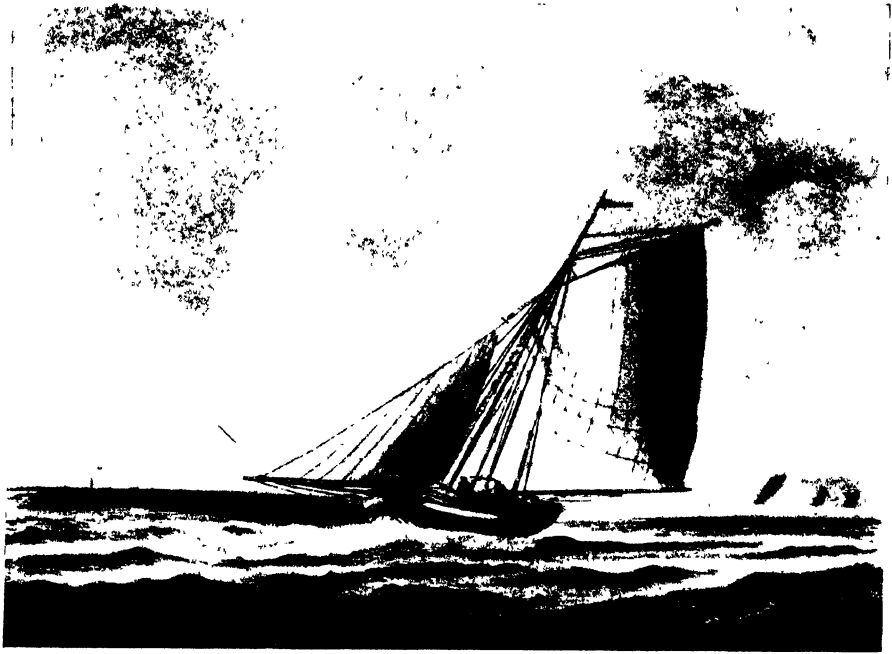


The present state of the **ABERGAVENNY**, in 10 fathoms of water 8' 10" high 5' 6" in. head is means using in recovering the Property on board.
Sept 20th 1805.

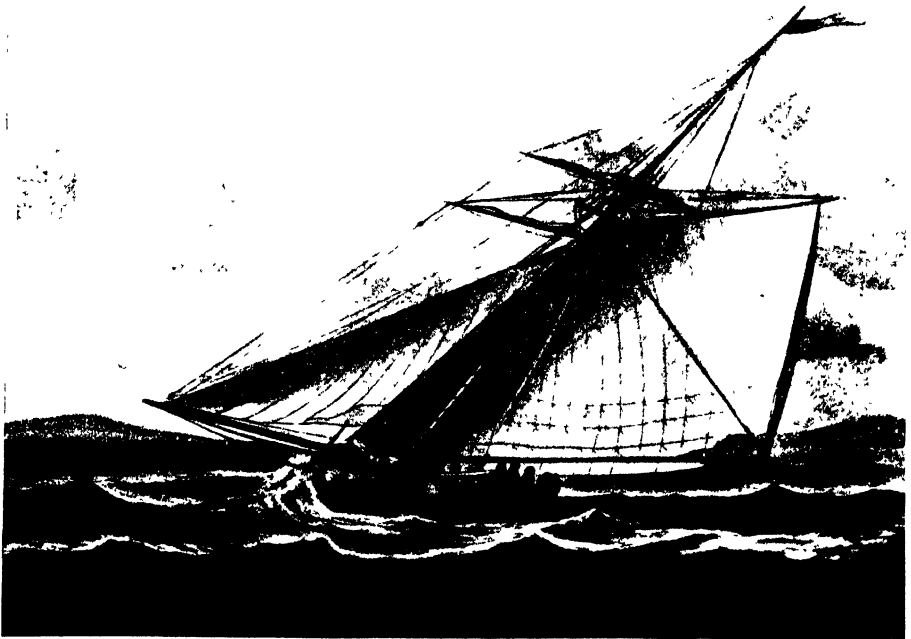
(Macpherson Collection)

DIVERS AT WORK ON THE WRECK OF THE EAST INDIAMAN, "EARL OF ABERGAVENNY,"
SEPTEMBER, 1805.

The relation of Greathead's earliest lifeboat to the Institution boats of to-day may clearly be seen in the first of these illustrations. The salvage of cargo in ten fathoms of water by means



THE "ST. GEORGE"

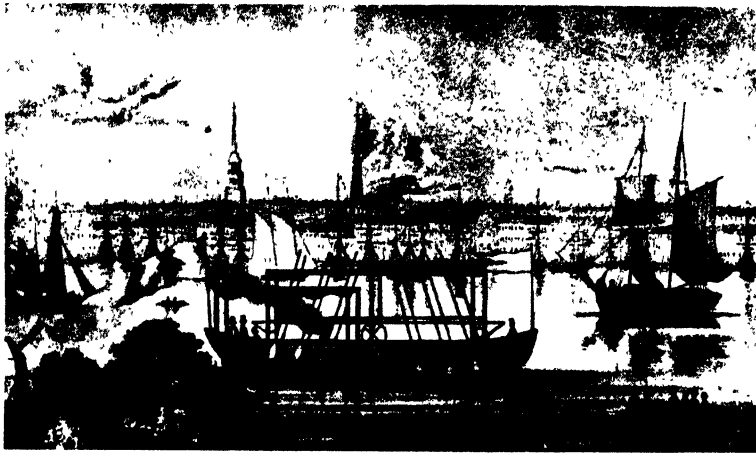


(Macpherson Collection)

THE "VIGILANT"

EARLY NINETEENTH CENTURY YACHTS
(FROM AQUATINTS IN COLOUR BY MERRET AFTER B. CHURCH)

The influence of naval ideas on the larger craft may easily be



THE "PERSEVERANCE," 1787



(Macpherson Collection)

THE "CHARLOITE DUNDAS," 1802
(FROM A LITHOGRAPH PUBLISHED IN 1848)

The Perseverance, a curious steamboat with six paddles a side, was John Fitch's first experiment. The Charlotte Dundas was the first really practical steamboat but was hounded off British waters.



(Macpherson Collection)

THE GREENLAND WHALE FISHERY
(FROM AN AQUATINT BY AND AFTER DODD, PUBLISHED 1789)

At the date of this incident the whalers were among the most prosperous ships under the British flag.

CHAPTER XXVII

Seaborne Trade

British Commercial Panic.

Although it had been obvious for some time past that war was inevitable, immediately it broke out there was a very serious commercial panic in Britain. Some of the biggest commercial houses, including many shipping companies which were anticipating the first shock, gave way under the strain until Parliament authorised the issue of five million pounds on loan to the merchants of the principal shipping ports against property worth twice as much as the amount borrowed. Perhaps it was this provision of security, perhaps it was the support given by the Government to the mercantile community that gave confidence, but the entire amount demanded of the Government was well under four million pounds, and, instead of disappearing, British shipping began to prosper exceedingly. There was still a great dread of famine, and, to get ahead of our story a little, the winter of 1794-5 was so unfortunately early and severe that the price of wheat rose from £2 15s. 7d. a quarter in the New Year to £3 17s. 2d. at the beginning of July and £5 8s. 4d. a month later. This was a very serious state of affairs for the country, and to check it all neutral vessels carrying corn to France were captured by British frigates and brought into port, the owners, however, being paid a very generous price for their merchandise and not losing in any way.

British Cargoes in Neutral Ships.

The question of belligerent cargoes in neutral ships has always been a very thorny one, the declaration made by Catherine of Russia in 1780 only going to complicate it. In May, 1793, the French National Convention took up the stand that British property in neutral vessels was to be captured by their men-of-war and privateers, with the exception that American ships would be respected no matter what they were carrying. This attitude did not last very long, however, and soon the Convention authorised French ships to seize American vessels just as much as any others. From time to time they were treated with special favour for political purposes, but the favour never lasted very long, and when the United States and Britain concluded a trade treaty the French were particularly anxious to capture American ships. The French described this agreement as perfidious condescension to the tyrannical and

homicidal rage of the English Government, which plunged the people of France into the horrors of famine. The French were indeed so indignant at the agreement that war between France and America very nearly broke out, and the ill feeling which eventually resulted in an open breach was simmering very near the surface for years. On January 18th, 1798, the French Directory issued a still more drastic decree which read : " That all ships having for their cargoes, in whole or in part, any English merchandise shall be held good prize, whoever is the proprietor of such merchandise, which should be held contraband from the single circumstances of its coming from England, or from any of its foreign settlements. That the harbours of France shall be shut against all ships having touch with England except in cases of distress, and that neutral sailors found on board English vessels shall be put to death."

Enforcement of the Declaration of Russia.

In 1796 the famous " Declaration to the Courts of St. James, Versailles and Madrid " which the Empress Catherine of Russia had issued in 1780 was actively enforced. The original document asserted that the Empress fully manifested her sentiment of moderation and, further, that she supported against the Ottoman Empire the rights of neutrality and the liberty of universal commerce. At the same time she expressed surprise that her subjects were not permitted decently to enjoy the fruits of their industry and the rights belonging to a neutral nation, and she set out in full what she considered to be these rights. Firstly, that all neutral ships might freely navigate from port to port and along the coasts of the nations at war. Secondly, that effects belonging to the subjects of the said warring powers should be free in all neutral vessels not carrying goods which were declared contraband of war. Thirdly, that certain specified merchandise should be free ; and fourthly, that a blockaded port means one which is so well watched by the ships of the attacking power that it is dangerous either to enter or to leave it. Denmark and Sweden agreed with these doctrines, and naturally the powers that were being blockaded by the British fleet saw great virtue in them. They were not enforced before the end of the War of American Independence, but in 1796 the Northern Confederacy decided to put them into operation. The United States were handicapped more than anybody else and immediately agreed to Russia's doctrines, asserting the slogan that the flag covers the merchandise. According to their theory, a neutral flag sheltered ships from search no matter what they were carrying, but they issued a very narrow list of items which they were willing to regard as contraband of war and which it was against the dignity of a neutral to carry. They did not, however, put forward any practical scheme whereby their nationals could be prevented from carrying such contraband, and their protestations were not listened to very seriously.

The Shipowners' War-Time Profits.

As the war went on there was less and less profit in the ship-owning

industry, while the neutral powers who were able more or less to evade the blockade made bigger and bigger profits. For one thing, Britain put a very heavy tax on shipbuilding materials, whereas the Baltic Powers were only too glad to supply them to neutrals at a commercial price. All dues rose to an alarming extent, while the activities of the Press Gang also increased the difficulties of the shipowner. The authorities realised the difficult position of merchant shipping and assisted in various ways, particularly in the development of the colonial trade. One good thing about the very difficult period through which British shipping passed at this time was that it began to make people realise that the Navigation Laws, excellent as they had been when they were first passed, were hopelessly obsolete and were indeed hampering British commerce considerably. It was a long time before this understanding went so far as to cause the repeal of the laws, but it was a big step in the right direction.

The Development of Canada.

When the authorities realised that British shipping was urgently in need of practical help, they turned to the colonies. The West Indian trade received a good deal of attention, as did also the Canadian. Emigration to Canada was encouraged, in spite of the need that the home country had for man-power. Naval stores were becoming very difficult to procure from the Baltic, while at the same time the discovery was made that Canadian pine was far better than any Baltic wood for making big spars. Hemp, pitch, tar, resin and turpentine were produced in great quantities in Canada, so that really the decision of the Baltic Powers to go against Britain at sea was a blessing in disguise and led to the development of our most important colony.

The Case of the "Cincinnati."

The most extraordinary case resulting from French indignation at the trade treaty concluded in 1796 between Britain and the United States was the famous case of the *Cincinnati*. She was a Baltimore ship of just over 200 tons, commanded by Captain Martin, and bound from Baltimore to London. She was boarded by a French naval brig, who approached under British colours. Captain Martin and several of his crew were made to go on board their captor, when his papers were examined. Disappointed in not finding that the cargo was English property, the captain attempted to bribe Martin into a declaration to that effect, promising that, if he would admit it, he would be paid his full freight and should have a present of £1,000 for himself. Martin stoutly declined to enter into any such arrangement, whereupon he was submitted to the torture of the thumbscrew for nearly four hours, until the approach of a strange sail alarmed his captors and gave him his liberty. When he was found by a British man-of-war his thumbs were still badly mangled, and from his own deposition and the other evidence of the case there is no doubt of its authenticity.

The Convoy Duty.

The activities of Napoleon's privateers and cruisers soon made it necessary to improve the convoy system and in 1798 the convoy duty was imposed. No ship was to leave British shores without a convoy or she was liable to a fine of a thousand pounds. This was very necessary, as most shipmasters preferred to run the risk of the enemy rather than put up with all the inconveniences and delays of the convoy, for naturally their speed was regulated by that of the slowest ship and some of the ships in those days were very slow indeed. If a ship, having left England in a convoy according to law, wilfully parted company with it, her captain's share of the insurance was automatically cancelled. The only people exempt from the convoy regulations were coasting vessels, ships in the Irish trade, ships duly licensed as privateers by the Admiralty, ships so small that they were not registered, and the ships of the East India and Hudson Bay Companies, practically all of which had privateers' commissions. To pay for the convoys extra duties were levied on certain imports and exports and a variable tonnage duty was paid by all trading ships, starting with sixpence a ton for those which traded no further afield than Ireland and running up to three shillings on ships that went as far as the East Indies.

Defrauding the Underwriters.

During a Parliamentary commission of enquiry into marine insurance in 1809 some very interesting instances were given of the manner in which marine underwriters could be, and were, defrauded. Needless to say, the slow communications of those days helped the swindler immensely. Most of the instances cited were very palpable cases of scuttling, without the least skill and with remarkably little attempt at concealment. One such was a ship which was supposed to have loaded with silk at Leghorn and sailed one morning in beautifully fine weather, the crew rowing ashore the same evening with the story that their ship had foundered. As a matter of fact, they had not taken the least precaution to prevent the underwriters getting the information that the ship had been loaded with sulphur and not with silk at all. When the underwriters discovered a particularly flagrant case of this sort and prosecuted the captain was generally hanged if found guilty; but naturally the amount of fraud that went on caused the rates quoted to honest ship-owners to be unhappily high. In other cases the sentences appear to have been very lenient for the offence.

The Case of the "Adventure" Brig.

One of the most celebrated cases of defrauding the underwriters in these days was that of the *Adventure* brig, under Captain Codling. She sailed from the Thames in July, 1802, bound for Gibraltar and Leghorn with a general cargo, which was insured at Lloyd's for between four and five thousand pounds. She then went up to Yarmouth to take in more cargo, the insurances on the ship being at the same time doubled. Then the supercargo was changed. The *Adventure* sailed for Yarmouth and got as far as Deal, but then returned to Aldeborough for no

apparent reason. Then back again to the Downs, and when she sailed the first action of Captain Codling was to bring a keg of rum on deck and to serve a generous tot to all hands. The ship began to founder off Brighton in calm water, while the captain and crew took the first opportunity of abandoning her and making themselves comfortable in the Old Ship Inn. The whole business was so suspicious that the underwriters immediately sent down a sea captain to look into the matter, and he immediately made preparations to get the brig on to the beach. As soon as this was done, a number of auger holes were discovered in the ship's sides. The owners, supercargo, and Captain Codling were tried at the Old Bailey, the supercargo being acquitted, the captain hanged at Execution Dock, and the two owners getting off on a skilfully pleaded point of law. Their defence caused a new Act to be passed which made scuttling a very much more difficult and risky business.

Scuffle-Hunters.

The lowest class of the thieves' society were the dockers who went in for looting, generally known as the scuffle-hunters. They went about their work in long aprons, and as there was no proper means of searching dockers in those days as they left the port, they managed to carry away a good deal concealed under them. The lightermen also took their share, while the Peter-boatmen hung about the boat while she was afloat, and the mudlarks splashed in the mud when she was high and dry, each of them ready to make away with goods that were dropped overboard by the men in the ship. Rum was lowered overside in skins and bladders which they concealed under their clothes. All these thieves had valuable allies in the rat-catchers, who were allowed to go from ship to ship to destroy the vermin that then infested them, but who were not above making jobs for themselves by introducing large numbers of rats into a ship which they wanted to loot.

The River Pirates.

The river pirates were much more ambitious in their operations, frequently resorting to arms for the purpose of filling the barges and lighters which they used, barges and lighters that had generally been stolen first. They would steal whole barges full of merchandise, and if trade was slack in this way they would simply board a ship, overpower such watch as there might be, and take whatever they wanted. On other occasions they cut the ship's cables and made off with her anchors and some of her chain, leaving her to drift as she pleased. It must be remembered that there were no river police in those days and that the pirates had it all their own way. These river pirates, especially those who operated at night, were known as Light Horsemen, and there was a regular scale of bribes for the ship's officers and revenue officials in cases where it did not appear advisable to use force. Naturally the whole system was organised by receivers on shore, generally marine store dealers. In his account of the river Thames in 1802 Mr. Patrick Colquhoun estimated that there were practically eleven thousand river

thieves of various sorts, banded together in a close organisation which made them particularly dangerous.

The Case of the "Lord Nelson."

British merchantmen were, of course, liable to attack by armed enemies all through the period, but space prohibits many instances being given. One of the many cases in which British East Indiamen suffered at the hands of the enemy occurred in August, 1803, when the East Indiaman *Lord Nelson*, mounting twenty long 18-pounders and six 12-pounders, was attacked off Brest by the French 34-gun privateer *Bellone*. In point of armament the attacker was overmatched, for only eight of her guns were of any weight, but she carried a crew of 250 men against the British ship's 102, and they were infinitely better trained and disciplined. She therefore closed her distance as soon as possible and boarded. She was repulsed, but on the second occasion she was carried after five British seamen had been killed and over thirty wounded. Thirty-one men were put on board and she was taken to Corunna, but soon fell in with a British frigate. Knowing that she had the heels of such a ship, the *Bellone* hotly engaged her enemy in order to give her prize a chance of getting to port, but in the meantime a little Plymouth privateer named the *Thomas and John*, mounting nothing heavier than 6-pounders, attempted for over an hour to retake her. Later the 18-gun sloop *Seagull* also attempted it, but she also was forced to break off the action in order to carry out repairs. When these were effected, however, she resumed the chase, but the *Lord Nelson* was cut off by a British squadron of four line-of-battle ships. She surrendered to Commander Burke of the *Seagull*, which, considering the gallant way in which he had tackled a ship of such superior force, was just as it should be.

CHAPTER XXVIII

Sea Lawbreakers

Smugglers and Yachtsmen.

The development of the sailing yacht in British waters was very severely handicapped by the laws and regulations which the Government were forced to put into operation against the smugglers. As it had been proved time and again that the smuggling vessels were nearly all capable of showing the revenue cutters a clean pair of heels in most weathers, the authorities attempted to suppress free trading by instituting limits beyond which vessels were not allowed to hover, that is to say, to cruise without any definite business, on pain of forfeiture. In 1784 twelve miles was the limit from the shore; in 1802 it was sixteen, and some time afterwards 300. But in the meantime yachts built for racing or pleasure cruising had been so severely discouraged that they had practically disappeared. Another strong discouragement of yachting during this period was that enemy privateers, both American and French, made their captures well inside the Channel.

The Fate of Captured Smugglers.

Generally speaking it was ordered that all ships captured smuggling were to be sold with the proviso that they should be broken up. Buyers were to undertake to separate the planks, unhinge the rudders, unship the windlass, remove the stern post and saw through the keel in three places. Later these regulations were amended and in certain circumstances captured smugglers were allowed to be sold for use as privateers. It was a curious thing, however, that most of the ships so sold went back to their old business, so that a new set of breaking-up regulations were established which provided a very solemn ritual. When a ship was condemned the customs were to take out her ballast, masts, pumps and bulkheads. They then ripped up her decks fore and aft, sawed the beams, ripped off a proportion of the bottom planks, cut through the keel in four separate places, and the stern post in three. After that one can quite understand that it was far less trouble to build a new boat than to attempt to refit one that had been condemned.

The Encouragement of Smuggling.

During the Napoleonic Wars the smugglers certainly took away from England certain commodities in exchange for the silk and brandy that they brought across from France, but most of the payments were

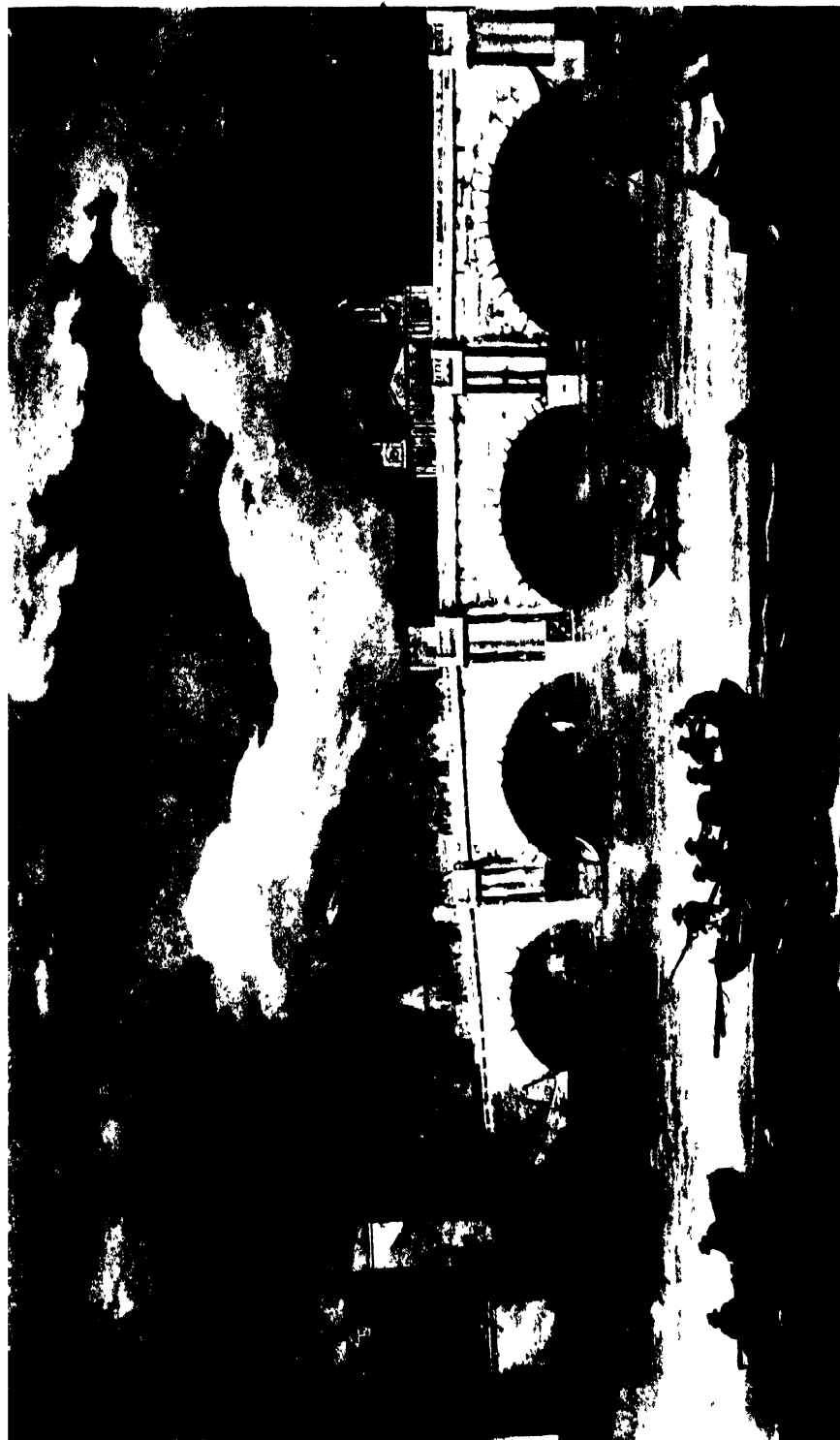
made in cash, and it was estimated in the year 1800 that some ten or twelve thousand guineas in gold were carried by smugglers to the Continent every week. Naturally this made a huge drain on British resources and was of equal advantage to France, while the commodities that it bought could not have been sent out of the country in any other way. First of all Napoleon gave the smugglers a certain quarter in the town of Dunkirk, but they were not content with this and appear to have rioted all over the town. At times there were about 500 of them in the town, and as they were all reckless, dare-devil fellows, the French soon found them unwelcome neighbours. They therefore gave them a camp just outside Gravelines and the town of Roscoff.

A Smuggler's Flag.

It was obvious that the British revenue authorities could not stop foreign ships on the high seas just as they pleased, and in order to arrest a foreign ship for smuggling it was necessary that she should be caught actually landing the goods on the British coast. It was not by any means difficult to attain citizenship in Ostend in times of peace, and although a man might be obviously English and rejoice in the name of Smith, he could produce papers proving his French nationality, and for an officer to search him was to invite all sorts of legal difficulties. The studied decision of the Attorney-General was that a ship was liable to forfeit only if she were the property in whole or in part of British subjects, but that in cases in which the crew appeared to be British there were reasonable grounds for taking the ship into port in order that she might be given the opportunity of proving that she belonged entirely to foreigners. At the same time, to do so was a grave risk on the officer's part.

The Foundation of the Coastguard.

Towards the end of the Napoleonic Wars it was obvious that the Customs and Excise officers on shore and the revenue cruisers afloat were not in any way capable of protecting the King's revenue and preventing smuggling as they should have done. Therefore, H.M.S. *Ramillies*, of 74 guns, was placed in the Downs, and the 42-gun frigate *Hyperion* at Newhaven, while the greater part of their crews were landed and put in the Martello Towers which had been built along the coast for the prevention of invasion, stations being built only where these towers did not exist. Each tower was in the charge of a petty officer with a few men, and each group of towers was under a naval lieutenant who was generally old for his rank and had very little chance of promotion. The men were not the best in the fleet, for the service was unpopular and the volunteers generally took the step for the purpose of being able to augment their income by joining the smugglers. Breaches of discipline, which appear to have been very frequent, were punished with the lash on board the two ships. This form of coast blockade lasted until well into the next period, when it was replaced by what later developed into the magnificent coastguard force.



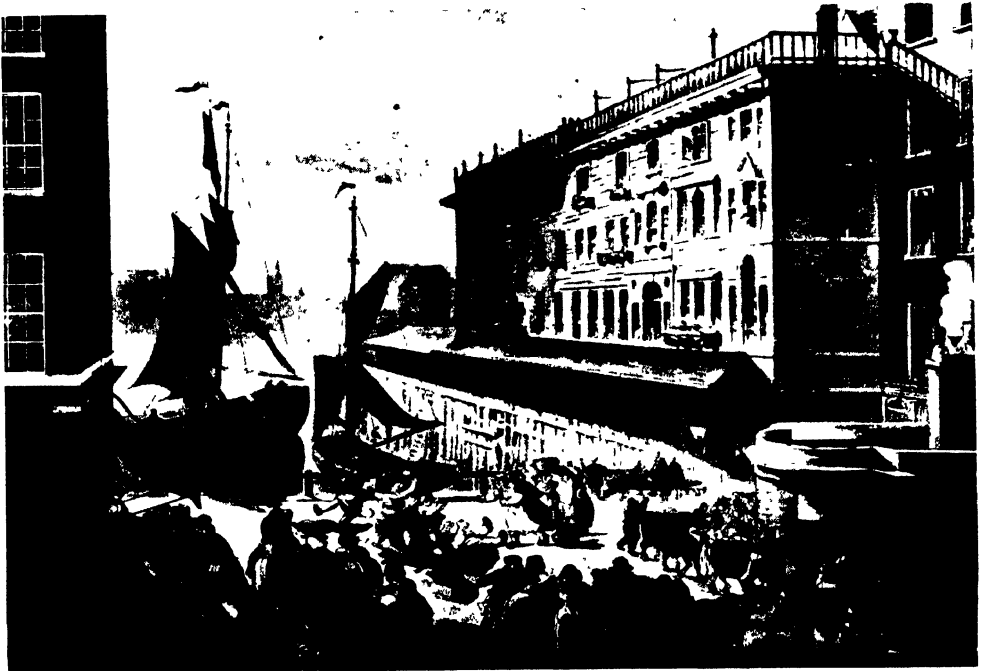
(Macpherson Collection)

BLACKFRIARS BRIDGE, LONDON
(ONE OF A PAIR OF AQUATINTS IN COLOUR BY T. SUTHERLAND)

Although the coast buttresses of London Bridge practically confined the shipping of the port to the Pool and lower reaches, there was even in this period a certain amount of barge profit above bridges.



INDIA HOUSE, THE SALE ROOM



BILLINGSGATE MARKET

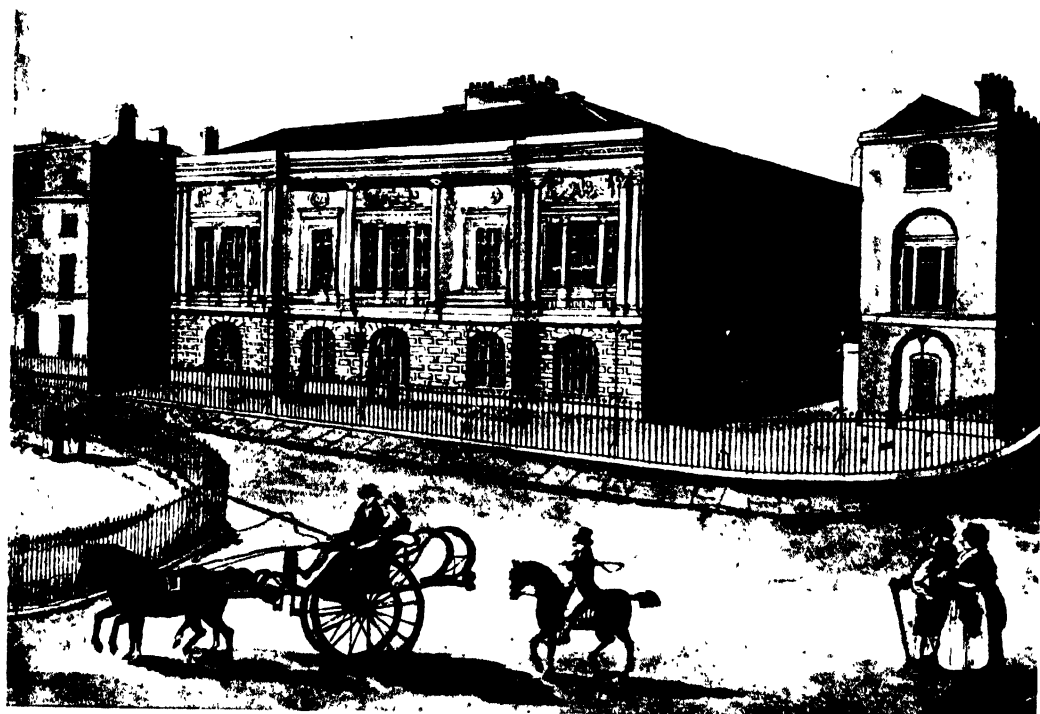
(FROM AQUATINTS IN COLOUR AFTER ROWLANDSON AND PUGIN, 1808)

(Lent by Messrs. T. H. Parker)

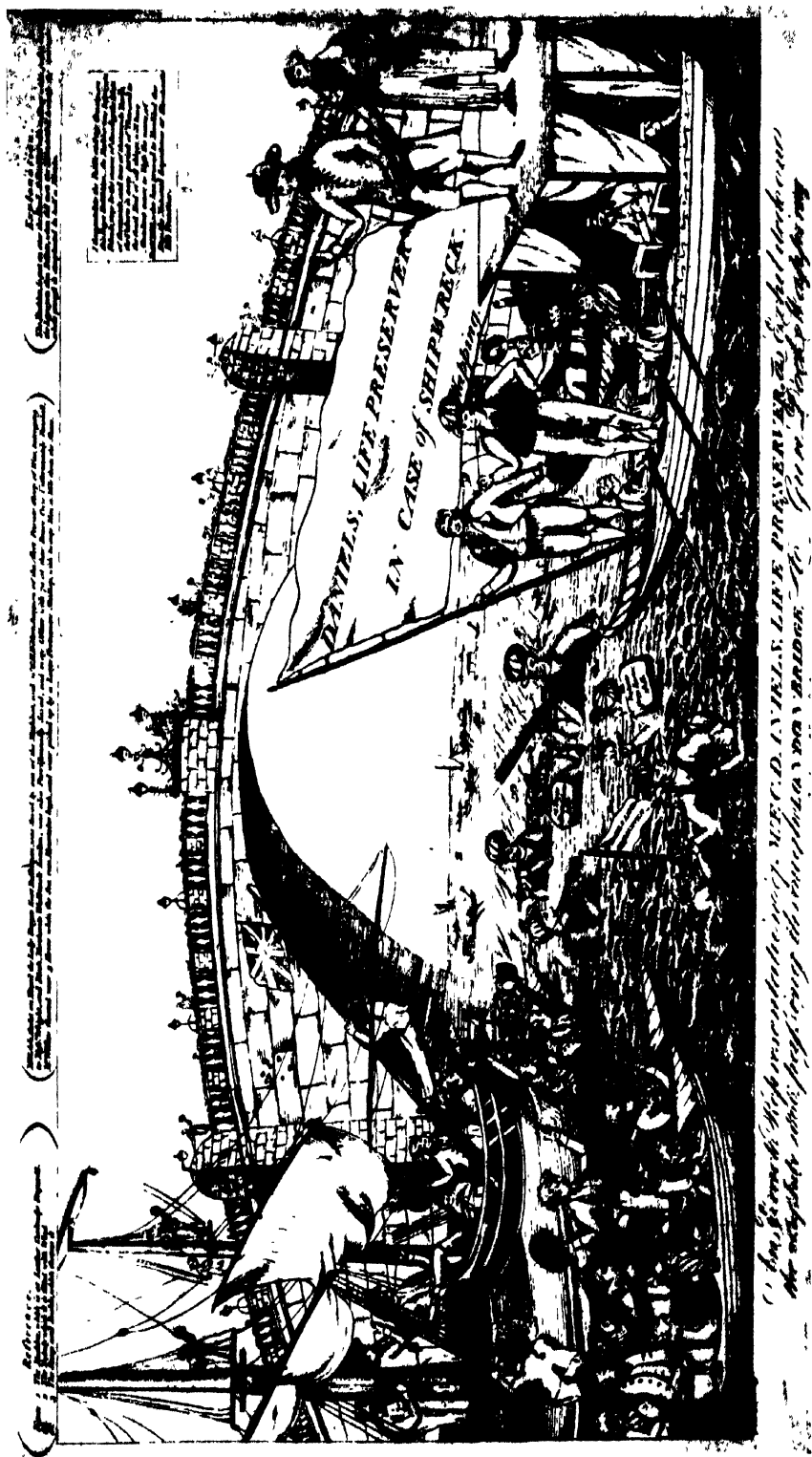
The discharge of each cargo was a signal for great excitement in the sale room at the India House. There are many references



THE LONG ROOM AT THE CUSTOM HOUSE
(FROM AN AQUATINT IN COLOURS AFTER ROWLANDSON AND PUGIN, 1808)



TRINITY HOUSE, TOWER HILL, LONDON, ABOUT 1795
(FROM A CONTEMPORARY DRAWING)
(Lent by Messrs. T. H. Parker)

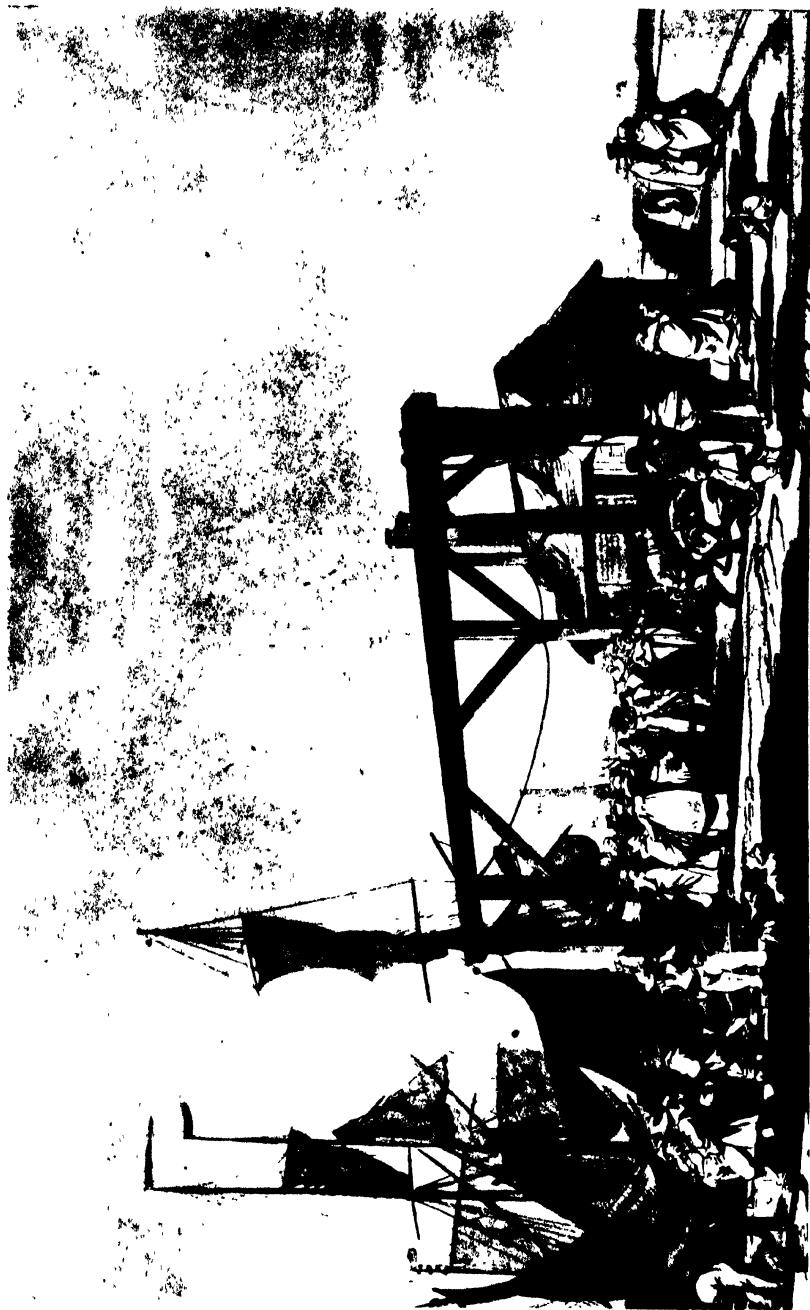


1. As soon as High resolution is completed, W.F.C.D. CANTON'S LINE PRESERVATION is completed and the city shall then proceed to construct the bridge. The new bridge is being

(Macpherson Collection)

EXHIBITION OF DANIEL'S LIFE PRESERVER, JULY, 1806
(FROM A CONTEMPORARY PRINT)

It was an age of intention and many attempts were made to ensure the safety of life at sea.

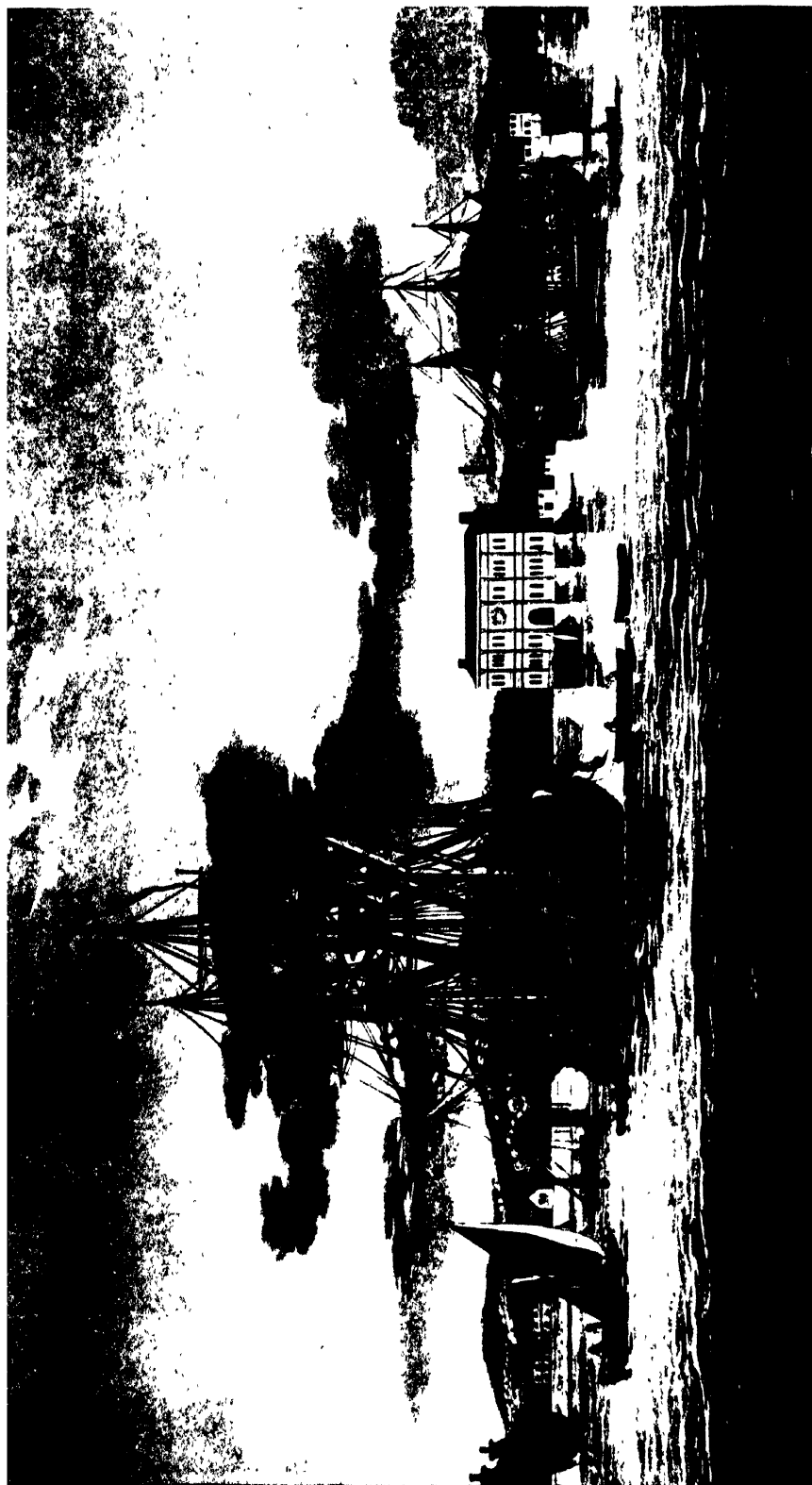


(Macpherson Collection)

MARGATE.—THE ARRIVAL OF THE HOY

(FROM AN AQUATINT IN COLOURS BY STADLER AFTER P. J. DE LOUVERGOURG, R.A., PUBLISHED 1801)

Before the general introduction of steamships the passenger trade to the coast towns was carried on by means of hoys, whose arrival was one of the great excitements of the day.



(Macpherson, Collection)

THE "ESSEX" EAST INDIAMAN, BUILT 1780
(FROM AN AQUATINT BY J. WELLS AFTER T. LUNY)

In Indianan whose service included a cruise against Dutch shipping in the capacity of a frigate



(Macpherson Collection)

THE "BRITANNIA," EAST INDIAMAN, 1806-1809
(FROM A CONTEMPORARY PAINTING)



(Macpherson Collection)

THE "GREYHOUND," EXCISE CUTTER, ON A WIND, CHASING
(FROM AN AQUATINT IN COLOURS AFTER T. SOUTTER, PUBLISHED 1794)

The Eighteenth-Century Pirates.

Generally speaking, the end of the century was a very blank period for piracy, certainly for interesting piracy, for these gentlemen have never flourished very much in war time. There were, of course, many freebooters of various sorts, but they were most of them small fry who went out in a shore boat and simply looted any merchantman that was rash enough to come within their reach. The bigger gentry of the profession, with one or two rather conspicuous exceptions, were all busy either in the fighting navies of their various kings, or else serving as privateers. Such as had no stomach for this sort of work had ample opportunity of getting a very good living in merchantmen who were working at war-time premiums, while generally the merchantmen that were worth taking were so well armed for the purpose of beating off enemy privateers that they were in a position to give the pirate a very much warmer reception than he had any liking for. Therefore, the period of the Revolutionary and Napoleonic Wars may be regarded as a very blank spell from the point of view of piracy in home waters, although there was a certain amount done in the East and West Indies and along the South American coast.

CHAPTER XXIX

The Development of the Warship and the Steamer

The Strength of Ships.

The war with France had shown that nearly every man-of-war that went to sea was deficient in strength, for the old method of construction had been continued, while ships had increased very greatly in size and in weight of armament. Therefore, Sir Robert Seppings and a Mr. Roberts, a sub-surveyor of the Navy, introduced a system of iron knees and chocks with iron side-plates which very greatly increased the strength of the ship. Sir Robert Seppings then went still further and introduced his famous trussed frame, which effected a great increase in strength and especially checked the tendency for ships to hog at sea. Seppings also introduced numerous other improvements into the method of building ships for the Navy.

The Round Stern.

At the very end of the Napoleonic war a great improvement had been made in the shape of ships by doing away with the old beak bow surmounted by a square bulkhead that was not sufficient to keep out grape, and substituting a high bow in modern fashion. The stern was still square, however, and it was very difficult to get any bearing from the after guns. Certain captains obtained this by the expedient of blowing a hole through their planking, but it was an expensive and dangerous proceeding and required a man with a good deal of courage to undertake it. Seppings brought in a circular stern, which permitted an all-round fire, but this had considerable disadvantages, and in 1829 Mr. Roberts and Mr. Blake improved on it by introducing an elliptical stern, which certainly looked infinitely better and was really rather more effective.

Improvement in Ship Design.

At this time a number of private individuals and naval officers were permitted to put forward their ideas on ship design, and one or two of them were put into practical effect by the Admiralty and tested. Captain Hayes built the cutter *Arrow* and tried her against H.M.S. *Basilisk*, Seppings's improvement on the revenue cruiser. The *Arrow* did so well in this trial that the principles of her construction were

adopted for the corvette *Champion*, the School of Naval Architecture backing Captain Hayes. The School constructed the corvette *Orestes* against Seppings's *Pylades*. These ships were tried against one another and altered time and again, until the experience gained meant a very considerable improvement in the design of these little vessels, which were built essentially for speed at sea. The system of conducting trials had produced such good results that it was continued; in 1827 Commander Symonds designed the *Columbine* to be tried against the *Sapphire*, *Tyne* and *Challenger*, and these ships, with the *Wolf*, *Acorn* and *Satellite*, were formed into an Experimental Squadron which carried out a number of cruises and which proved that the *Columbine* was superior in most conditions but failed when heavily laden in heavy weather. The trials supplied a mass of data, but although they did not actually prove anything they gave Symonds sufficient patronage for him to be allowed to continue his experiments in ship design.

Bigger Guns.

When the French began to advocate bigger calibres the British followed suit, and first of all achieved their desire by boring out guns to a bigger calibre. At the same time it was realised that the amount of windage allowed was quite unnecessary, which was a great step in the right direction. Experimental shell guns were constructed with calibres of 8, 10 and 12 inches, and H.M.S. *Phoenix*, firing the first-named, did excellent work in 1836 at San Sebastian. Immediately afterwards the French decision to re-arm their Navy was published, and the British immediately did likewise. One of the first results of the increased popularity of shell guns was the abolition of the carronade, but it must not be thought that the change was carried through without considerable opposition.

The Rifled Gun.

The rifled naval gun did not come into being until long after the rifled musket had proved its value. It was about the time of the Crimean War that Mr. William Armstrong, who was later to make such a great reputation by the manufacture of cannon, proposed to the War Office that field guns should be built on the same principle as the rifle, increasing the range and the effectiveness of the gun wonderfully. He turned out his first wrought-iron gun early in 1855, firing long lead projectiles instead of cast-iron round shot, and after repeated trials it was accepted as the standard field gun in 1858. This Armstrong gun was a breech loader, firing a projectile covered with lead, the idea being that this soft covering would engage in the rifling and give the requisite twist. At the same time Mr. Whitworth, who was afterwards connected with Armstrong, turned out a muzzle-loading cannon with hexagonal rifling. The Lancaster rifled gun must also be mentioned, a curious weapon with an oval projectile which caused some very nasty accidents in the Crimean campaign. Italy, Sweden and France all evolved rifled weapons, and of these the French was infinitely the best and led to a large number of smooth-bored guns being converted. All these guns

were for work on land, but naturally the naval artillerists were watching developments carefully, and it was not to be long before they were put to naval use.

The Inventor of the Paddle Wheel.

There was a good deal of discussion as to who was the actual inventor of the paddle wheel. Nicholas J. Roosevelt, who has already been mentioned in connection with Fulton's early steamboats, took out an American patent on December 1st, 1814, and afterwards, in 1816, issued an advertisement in the American Press, claiming to be the inventor and challenging any discussion on the subject. At the same time he threatened legal proceedings against anybody who should use such paddles without his licence.

The Screw Propeller.

When Archimedes invented the screw pump, he also presumably invented the screw propeller, although he did not realise it. The use of a screw as a propeller instead of a paddle was suggested as long ago as 1731 by a Frenchman named Duquet, but he had no idea of a steam engine and it came to nothing. Joseph Bramah in 1785 took out a patent for a screw propeller in addition to a paddle, but he does not seem to have put his idea to any practical purpose. William Littleton in 1794 took out a patent for a screw propeller to be worked by a capstan. He was a London merchant with a taste for ingenious invention, but he does not appear to have made any effort to put his ideas to practical use, although H.M. Transport *Doncaster* was propelled by this means at about a knot and a half in 1802. David Napier, Trevithick, John Millington, Robertson Buchanan, and others all put forward different schemes, but it was not until 1825 that a big step forward was made by the offer of a substantial reward for the best plan of propelling vessels without paddles. Commander Samuel Brown, R.N., submitted the winning scheme. His propeller had two blades, set at an angle of 45 degrees and cased forward. This propeller was worked by an engine of 12 horse-power and was fitted with a universal joint to permit it to be lifted right out of the water if necessary. Although the trials were successful they were not continued. After that came any number of new screw propellers, most of them of doubtful efficiency, until Francis Pettit Smith and John Ericsson submitted their ideas.

The Cylindrical Boiler.

With the demand for rather higher steam pressure it was realised that the old box type of boiler was quite unsuitable, and accordingly the cylindrical boiler came into being. By this means it was possible to generate steam up to 60 lbs. pressure and over, the boilers having two or more furnaces and being a great improvement on the old square boiler whose strength was obtained by numerous stay rods intersecting the interior. As steam pressure and power increased, however, the boilers had a tendency to increase in size far more than was convenient for men-of-war, where all machinery was supposed to be kept below the

water-line. So they were made double-ended instead of single-ended, and had a central combustion chamber. These boilers were excellent for their purpose and are maintained for the merchant service to this day, but as the naval engineer became more exacting in his demands the locomotive boiler came into being.

Early Tugs.

The original idea of the *Charlotte Dundas* (see Vol. III, pp. 228, 236) was to use her as a steam tug, but it was not until 1816 that the general public appreciated the value of steamers for this purpose. Then the Mersey ferry steamer *Charlotte* towed the sailing-ship *Harlequin* to sea and caused quite a sensation. Rennie, the famous engineer, was adviser to the Admiralty in 1819 and after having vainly attempted to persuade them to invest in tugs, he chartered a Margate steamboat at his own expense, and by towing a 74-gun ship against a strong Thames tide he so impressed the authorities that steam was introduced into the British Navy for towing purposes. At about the same time Mr. Joseph Price, a glass manufacturer on the Tyne, having invested a sum of money in a local steamboat concern, and having every prospect of losing it when the steamers failed to attract passengers, persuaded his colleagues to let him use the boats for towing colliers out of the river in foul winds. He did it most successfully, and although he met with very strong opposition from the local foymen and others, his system was eventually acknowledged as a success. In 1821 there were tugs on the Humber, and five years later on the Mersey.

David Napier's Experiments.

Steam navigation in Britain owes much to David Napier, who became interested in the subject, and in order better to study it took passage in one of the sailing packets between Glasgow and Belfast in the worst period of the year. Covered with spray and occasionally by solid green water, he sat perched in the bow and carefully studied the bow wave. Time and again he went aft and asked the skipper whether the sea might be considered rough, but the seaman was used to that sort of question and every time he answered that he himself would not call it so. Finally he was bound to admit that he had never sailed through a worse night, and to his surprise young Napier expressed himself as delighted, and murmuring, "I think I can manage, if that be all," turned in to search for dry clothes. He was satisfied that the bluff bow of the sailing packet was not the best form of avoiding resistance in a steamer, and accordingly he carried out his experiments with models in a small tank, a system that has now developed out of all recognition, and finally evolved the fine forward lines that were characteristic of all the steamers that he built. The first one was the *Rob Roy*, a little ship of 90 tons burthen, with an engine of 30 horsepower. She came out in 1818, and for two seasons ran between the Clyde and Belfast with considerable success. When she was replaced in these waters by a bigger ship, Napier sent her round to Dover, where she opened the steam service across the Straits, which has since become

the most important packet run in the world. To begin with, Napier himself was an engineer and built the engines to be put into hulls of his design, constructed in Clydeside yards.

Early Iron Armour.

In the early 'forties Mr. Delmeno carried out a number of experiments in the United States to prove that iron plates made excellent protection, and the British Admiralty became sufficiently interested to order a similar set of experiments in 1842. These experiments, however, had to contend with a good deal of bigoted conservatism and it was reported that they were not of the least use as protection, and that even if they were they would so overweight the ship that she could not possibly sail or steam. However, the Admiralty was not quite satisfied to accept these reports as they were, so that in 1846 the iron steamer *Ruby* was used as a target. The fact that shell went clean through her was probably due to the small size of the ship, which was only 73 tons burthen. At this time it was constantly alleged against iron ships that the side, when struck by a shot, split up into small pieces and langrange was scattered over the deck in dangerous quantities. When in 1850 further experiments were carried out rather more carefully on shore, the targets being made to represent the side of the steam frigate *Simoon*, they were very much more satisfactory, although not so striking as to overcome naval objections.

CHAPTER XXX

The Halcyon Days of Sail

The Beginning of the Clippers.

It was really the end of the war of 1812 which brought speed at sea into prominence. Until then the East Indiamen had jogged along in their comfortable way, speed being their very last consideration, and the merchants had been quite content to wait for their goods. Had they not been so patient, it is very doubtful whether any difference would have been made. The only ships which attempted any speed were the ships engaged in what was known as the perishable cargo trade—fruit and slaves. The exception to this rule had been the Americans, who had always built for speed for the purpose of evading the coast-guard cruisers which the Spaniards built in the vain hope of preserving their West Indian trade. During the war they continued to build for speed for privateering purposes, and when peace was restored they saw the opportunity of using this quality in general trade. Their ships made the fastest passages to the Oriental markets and profited accordingly. As the end of the American War practically synchronised with the end of the Napoleonic Wars and the consequent revival in trade, the other maritime nations, particularly the British, began to demand higher speed and more prompt delivery of goods. So the race for speed began and the main aim of the naval architect turned from seaworthiness and tonnage capacity to increased speed. It must be remembered that freights in general ran high, but everybody was willing to buy, otherwise the clipper ship era might never have dawned.

The Early Packets.

The first ships to feel the effect of the American idea of speed to a marked degree were the Atlantic packets, which began to carry passengers and mails regularly backwards and forwards across the Atlantic in 1816. Their predecessors were slow and cumbersome, they were built for speed, and although this did not make for comfort it led to the construction of the clippers. The famous Black Ball Line started with four ships of 400 tons apiece, and under men who had learnt to clap on sail when they were commanding privateers they began to show what speed could do. They ran between New York and Liverpool on

a fortnightly schedule, and it was wonderful what remarkably good time they kept considering that they were dependent on the weather. As their name became known, so their size and accommodation increased, but it was many years before the wretched emigrants in the 'tween-decks had even the smallest elements of comfort.

The Indian Trade.

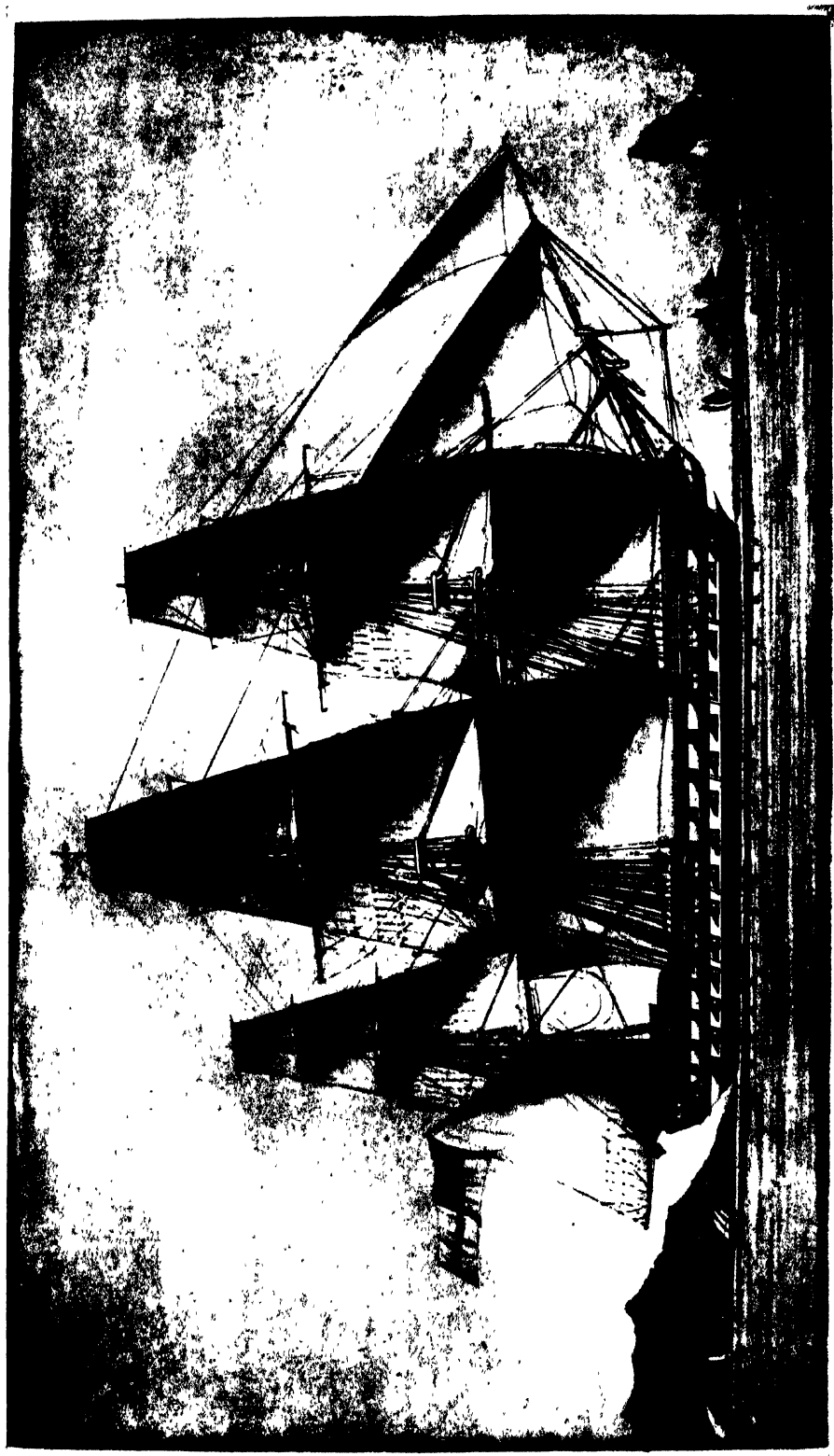
After the North Atlantic, the speed craze spread to the East, but more slowly. In 1814 the trade of the East India Company, which had been regarded as the strictest monopoly ever since its foundation, was thrown open as far as India itself was concerned, and the host of interlopers which had been operating on the coast for some years past were able to do so openly. The merchants of Manchester, Glasgow and Bristol attempted to get the trade to China opened at the same time, as it was by far the more profitable of the two, but in this they were prevented. It was apparently the ships' husbands who had the privilege of supplying tonnage to the East India Company who prevented the opening of the whole trade; their reasons are obvious.

The "Earl of Balcarres."

The high water mark of East Indiaman construction was reached in the *Earl of Balcarres*, of 1815, one of the few East Indiamen with two tiers of guns. She was of 1,417 tons burthen and had a crew of 130 men. This crew consisted of her captain, six mates, two doctors, six midshipmen, the purser, boatswain, carpenter, gunner, armourer, master-at-arms, baker, butcher, poulterer, caulker, cooper, sail-maker, two cooks, two stewards, eight boatswains, the gunner's, carpenter's, caulker's, and cooper's mates, seven servants for the officers and fifty-eight seamen. This was an extreme crew for an East Indiaman and was not often reached. In addition, like all East Indiamen, she had the right of shipping five supernumeraries.

The Disaster to the "Kent."

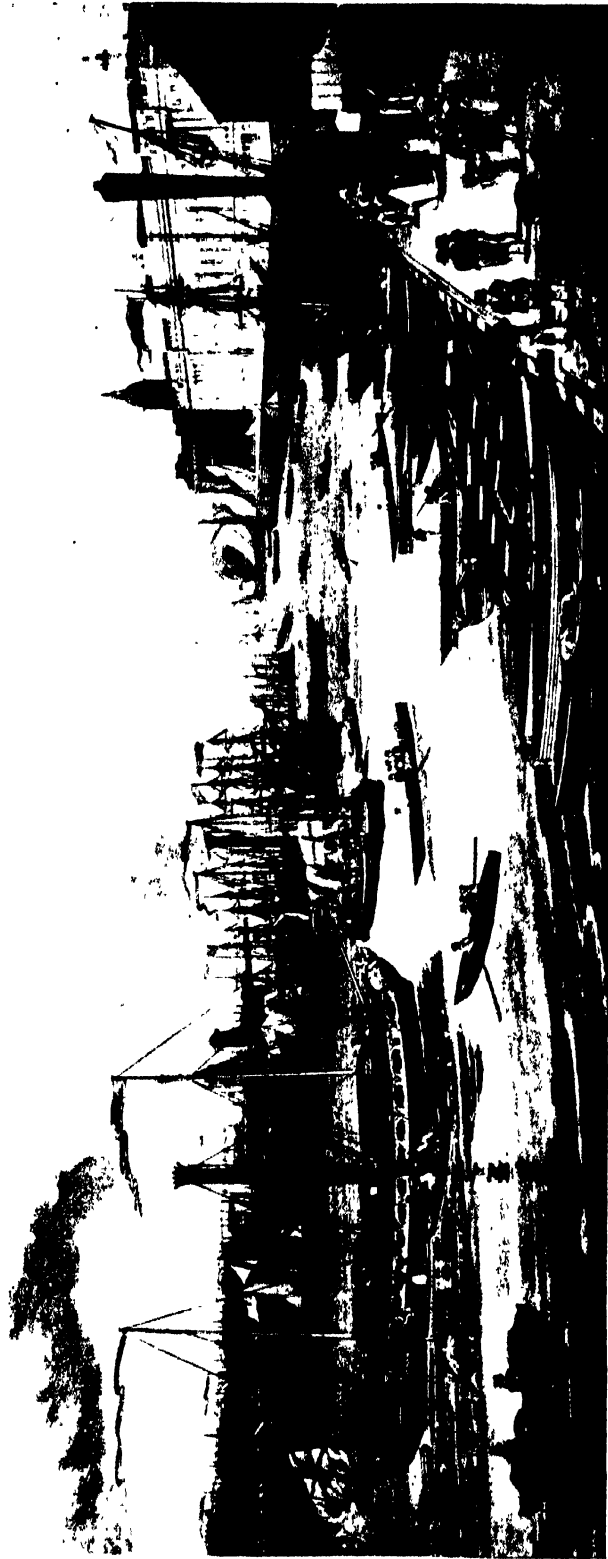
One of the greatest tragedies in the history of the Indian trade was the loss of the *Kent*, a first-class Indiaman of 1,350 tons, soon after she sailed on her maiden voyage in February, 1825. She was to go first of all to Bengal to land troops and a certain number of passengers, and then on to China. She met with very heavy weather, and in going into the hold to see if everything was secure one of her officers had the misfortune to drop a lamp on a bilged cask of spirits. It was immediately ablaze, and as the ship was already battened down in terrible weather, the situation was a very serious one. Every effort was made to put out the fire, but without avail, and in the meantime the dense smoke, entering into the 'tween-decks with the hatches battened down, had suffocated some sick soldiers, women and children. In their efforts to quench the fire large quantities of water were admitted into the hold, and soon there could be no doubt that the ship was sinking. At this juncture the 200-ton brig *Cambria* appeared on the scene, and immediately made preparations to save what lives she could. The soldiers were fallen in on deck, and their officers prevented any sign of



(Macpherson Collection)

H.M.S. "BELLEROPHON," 80 GUNS, LAUNCHED AT PORTSMOUTH, 1818
(FROM A WATER-COLOUR BY O'REILLY)

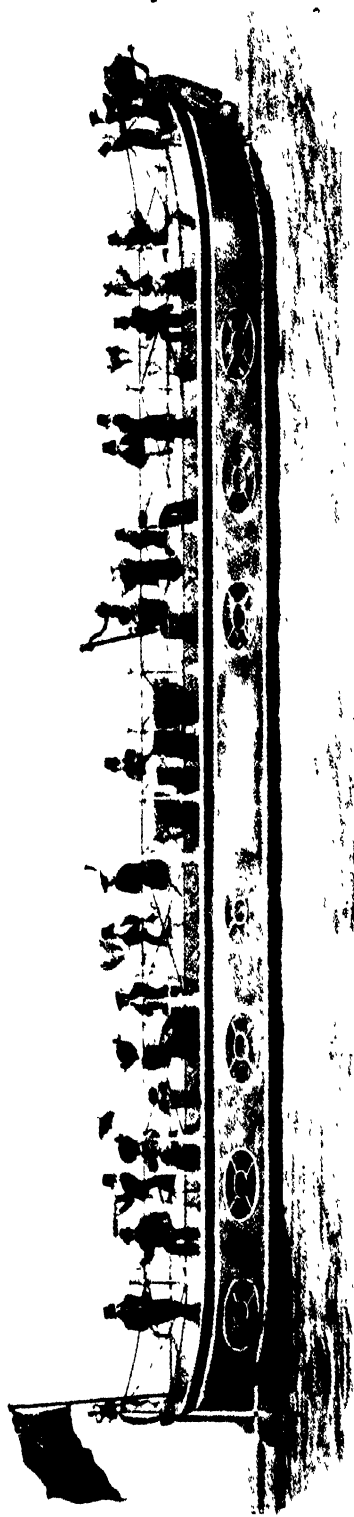
The high bow shows the distinct improvement of post-war design.



(Macpherson Collection)

VIEW OF LONDON BRIDGE AND CUSTOM HOUSE, WITH THE MARGATE STEAM YACHTS
(FROM A COLOUR ACCADANT DRAWN AND ENGRAVED BY R HAVELL & SON, PUBLISHED BY COLNAGHI & CO., JULY, 1820)

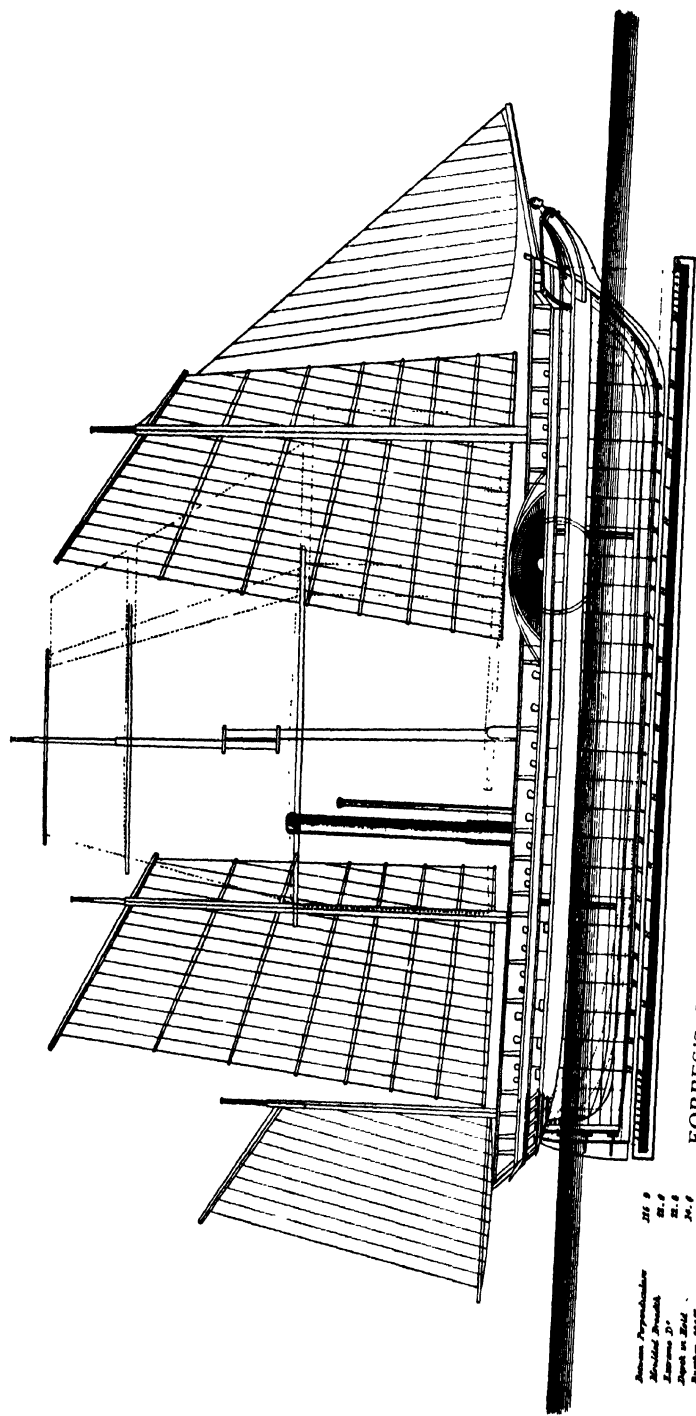
The London Engineer in the foreground was regarded as being the finest steamship afloat when she first came out and was put on the Margate run.



(Macpherson Collection)

ANDREW SMITH'S IMPROVED STEAMBOAT WITH CONCEALED ENGINES AND PADDLES
(FROM A LITHOGRAPH IN COLOURS BY DAY & HAGHE)

Objection was always found to the funnels of the steamboat and various ideas were put forward to do away with them, although they very seldom got beyond the experimental stage. The three-man band in the print is typical of the time.



FORBES'S STEAMER IN CALCUTTA, RIGGED WITH CHINESE SAILS, 1829

(Macpherson Collection)

British Proprietors
 British Proprietors
 British Proprietors
 British Proprietors
 British Proprietors

1829
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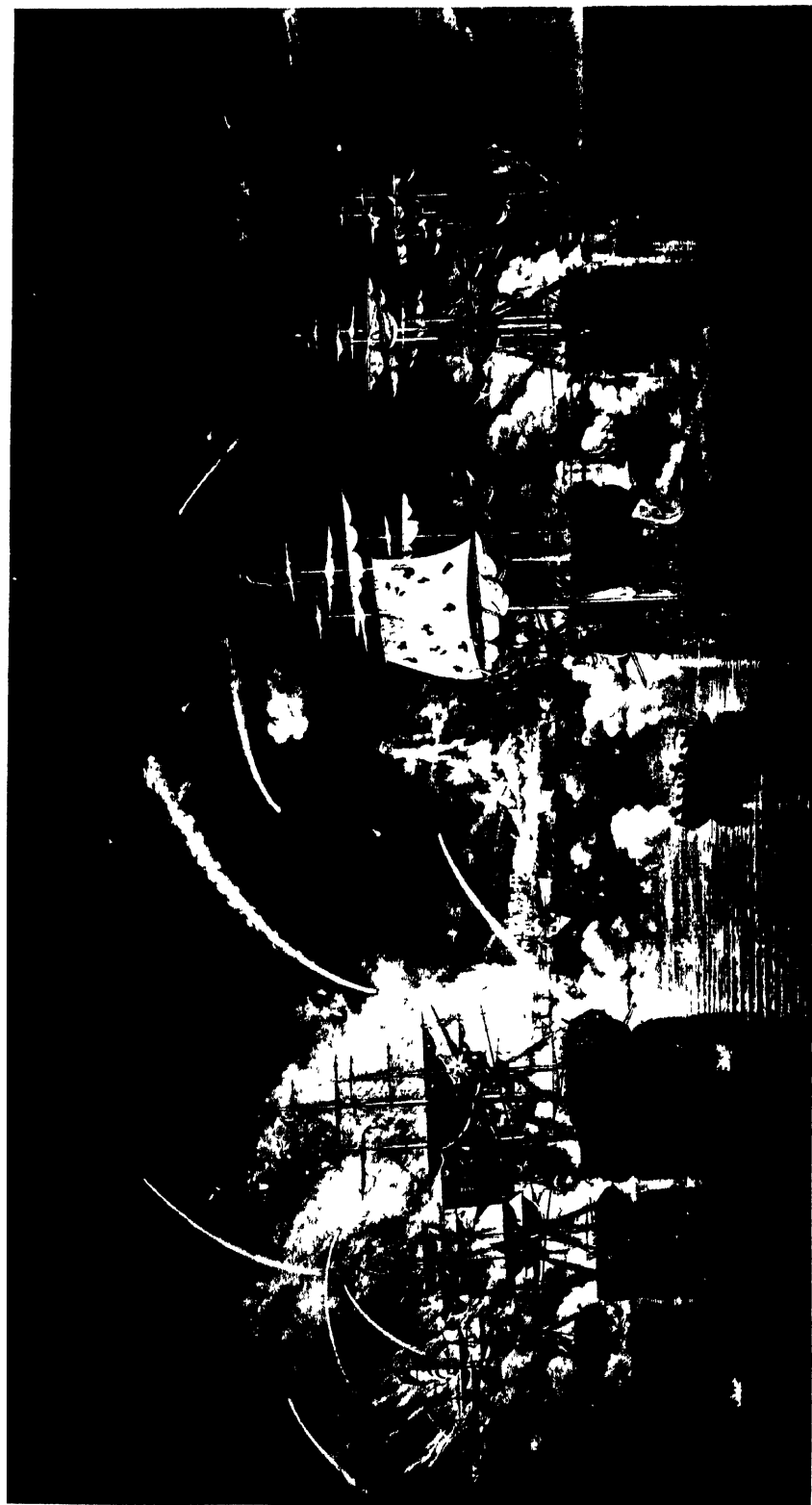
Steamships very soon began to make their appearance in Eastern waters, generally with local adaptations to their rig, but the idea of fitting one with junk sails was novel.



(Macpherson Collection)

THE FIRST STEAMER FROM MARSEILLES TO GENOA
(FROM A COLOUR LITHOGRAPH PRINTED BY DAV & SON)

The Mediterranean offered excellent opportunities for steam navigation and the French and Italians were not slow to take advantage of them.



(Macpherson Collection)

THE BOMBARDMENT OF ALGIERS, 1816
(FROM A COLOUR AQUATINT BY J. C. STADLER AFTER P. H. ROGERS, PUBLISHED FLEURY, 1819)

Exmouth's bombardment of Algiers destroyed the power of the Barbary corsairs for some time, but it was not long before they were just as troublesome, and it was not until the French conquered the country that they were suppressed.



(Macpherson Collection)

THE EAST INDIA COMPANY'S IRON STEAMSHIP "NEMESIS" DESTROYING CHINESE WAR JUNKS, 1841
(FROM AN AQUATINT IN COLOURS BY AND AFTER E. DUNCAN, PUBLISHED BY FORBES, 1843)

Foredoomed to failure by the pessimists, the Nemesis proved her-



(Macpherson Collection)

MR. LUCAS THROWING A BURNING SHELL FROM THE DECK OF H.M.S. "HECLA"

(FROM A LITHOGRAPH AFTER E. T. DOLBY, PUBLISHED BY COLNAGHI, 31 JULY, 1854)

This gallant action during the bombardment of Bomarsund won for Mr. Lucas, mate, one of the first Victoria Crosses to be given to the Navy and special promotion to the rank of Lieutenant.

rushing the boats by drawing their swords. Women and children were packed into the boats and sent across to the *Cambria*. It was found impossible to get all her people away, principally by their own fault, but over 600 were packed into the little *Cambria* and taken to Falmouth, while several others were saved by the ship *Caroline*, who was attracted to the spot by the explosion of the magazine. In all 82 lives were lost, and 600 odd saved in circumstances which made it appear impossible that there could be a single survivor. The East India Company presented the captain of the *Cambria* with £600, the first mate £100, and compensated her owners for all loss and demurrage, as well as distributing a generous purse among her seamen.

The Last of the East Indiamen.

It has already been recorded how the ships of the East India Company were not run directly by the Court of Directors, but by "Ships' Husbands," but all this was swept away in the 'thirties. The Company had already been deprived of their monopoly to India in 1814, and in 1832 the subject came up before Parliament again. They were then deprived of the last of their monopolies, that of the China Trade. The Commercial Charter terminated in April, 1834, and it being by then quite obvious that they could never hope for the old profits they caused all the Indiamen to be sold or paid off to their ships' husbands and confined their maritime activities to the Navy which they still maintained in the East. Some of the East Indiamen were run for years, either as free traders, as transports, or as convict ships, but many of them were broken up immediately they left the Company's service, their rich fittings and stout materials ensuring a good price. Many of the old East India Company's ships' husbands soon became the crack shipowners in the country.

The Transport of Convicts.

At the beginning of the period convicts to the penal settlement in Australia, Ceylon and elsewhere were generally taken out by East Indiamen, who then had the right to go where they willed to pick up a cargo. When the East India Company sold its fleet, however, the service was put up for tender and ships were chartered as they were wanted. Unfortunately the Government had no intention of paying any large sum, with the result that they got the very worst tonnage on the market and the poor convicts suffered accordingly. Their sufferings were due not only to the inadequate tonnage in which they were transported, but also to the opportunities that were given for graft of all sorts, opportunities which were eagerly taken by the officers and officials in charge of the ships.

The Blackwallers and Others.

When the East India Company decided to dispose of its fleet and retire from the shipping business in 1834, there was an immediate scramble for its tonnage and its trade. Numerous owners who had been ships' husbands under the Company used their experience to nibble at the Indian trade, and although some of them hailed from the north-east

coast, the class of ship used was generally lumped together under the title of the Blackwallers, or, more properly, the Blackwall frigates. This name came from the principal yard in which they were built, Green and Money Wigram's at Blackwall. Very fine ships they were, inheriting much from the traditions of the frigate-built East Indiamen, but cutting down the appalling waste of that administration and aiming more at speed. Although they were not clippers in any sense of the word, the Blackwallers made some very fine passages.

"The Tweed."

The most famous of the ships that are usually grouped together under the title of Blackwall frigates, although strictly speaking she did not come into the class, was Willis's *The Tweed*. She was originally built in India as a paddle frigate for the East India Company and named *Punjaub*, and into her construction were put the finest material and skill of the Bombay yards. Tradition has it that her lines were taken from a very famous French frigate which contrived to keep out of the way of British squadrons for many years in the Indian Ocean. Her first duty in 1855 was as a transport taking cavalry from India to the Crimea. She was one of a big convoy of steamers but before they had been long out she drew her fires, reduced sail and still managed to run out of sight of the rest of the convoy under full sail and steam. During the Indian Mutiny she did good service by offering a refuge to the women and children who were in the greatest danger, and later her seamen did splendid work as a brigade ashore with two 12-pounder guns. When the East India Company gave up its navy old John Willis bought *The Tweed*, took out her engines, and ran her as one of the most successful sailing ships he had. She ran to India, to the Far East, to New Zealand, as a hospital ship, as a trooper, as a relief ship to the starving Indians during the great famine, as a first-class passenger carrier and as a wool ship, and in every condition she did well. In the late 'eighties she came to grief off the South African coast and many of her timbers still form the roof of a church in Port Elizabeth.

The First Real Clipper.

There has been a good deal of discussion as to the exact definition of the term "clipper ship," as it is a popular phrase rather than a naval architect's. It is generally accepted, however, as a ship built primarily for speed, having raking stem and stern posts. The first ship that is given the name is generally the *Ann McKim*, a little vessel of 493 tons, which was built for Isaac McKim of Baltimore in 1832. He had her designed very much on the lines of the American privateers for the China trade, where her speed immediately gave her a prominent position. She could not carry very much cargo, but opium and other China cargoes ran to high values and speed was everything.

The Opium Clippers.

The opium ships had to be fast vessels for three reasons. Firstly, their cargo was too valuable to be kept long on shipboard; secondly, the China seas were still infested with pirates; and thirdly, although

most of the mandarins were in the pay of the opium runners and found it a very profitable business they occasionally awoke to their responsibilities to the central Government and sent out their junks in pursuit. They seldom, if ever, caught one of the fast little brigs or schooners, while the *dépôt* ships which lay at most of the Chinese ports were too powerful to be touched. These opium clippers were very much on the small side and were so fleet that their trade continued all through the opium war of 1840. They did not give way to the steamer until the early 'fifties.

The "Falcon."

One of the most famous ships of her time, both in yachting and opium-running circles, was Lord Yarborough's ship-rigged *Falcon*. She was designed to compete with the smartest sailers in the Navy, and on her measurement of 350 tons she carried 22 small guns. One of the sinecure offices which her owner held was that of Admiral of the Isle of Wight, and he gallantly took his little vessel into the Battle of Navarino, flying this flag. Owing to failing health he gave up yachting in 1835 and a London firm purchased the yacht as a speculation in the hope that the Indian Government would buy her as a fighting ship for the Burma war. They gave her two engines of 34 horse-power apiece, just enough to carry her over a calm, but by the time she got out there was no further trouble and she was sold to Jardine Matheson and Co., who took out the engines and made her the pride of the opium clipper fleet, just as she had been the pride of the Royal Yacht Squadron. Very heavily rigged, the *Falcon* was a wonder in the matter of speed and was sufficiently powerfully armed to beat off any attack that might be launched at her by Chinese pirates.

The Opium Trade in the China War.

Naturally, the China war of 1841 made the opium trade more difficult, for it redoubled the activities of the pirates and robbed the traders of what little protection they could hope for from the local mandarins. Also the Government was very anxious to buy the best of the clippers for use as despatch vessels and for patrols. The owners, however, decided that the profits were too good to be lost, and after consultation sent the clippers out in company for mutual protection, changing their lascars for white crews and arming them heavily. Three of the best-known ships on the trade, the *Sylph*, the *Lady Hayes* and the *Powasjee Family*, were thus sailing in company when they were caught by a fleet of semi-naval, semi-piratical war junks. A fierce battle took place which ended in the rout of the Chinese.

The Aberdeen Clippers.

The Americans must be given the credit for introducing the clipper ship, but the Scottish builders at Aberdeen were not slow to follow them. The principal of these was Alexander Hall, whose first clipper was the schooner *Scottish Maid* of 150 tons burthen, which was built for speed in order to compete with the paddlers which had the cream of the coasting trade. Speed was a vital necessity for this, and it was a

commodity which the smacks which formerly covered the trade did not possess. She was soon followed by other similar vessels, and before very long Aberdeen clippers began to find their way out into the China trade. It was not for some years, however, that they were ship-rigged; schooners and brigs were in the majority in the early days. One of the earliest was the famous *Reindeer* of 1850 under the command of Captain Anthony Enright, one of the finest sailormen who ever commanded a clipper. After that Hall built a large number of well-known ships. In moderate breezes they were faster and more weatherly, but they were so narrow and had such fine lines forward that in heavy weather they could not stand up against the Yankees, and were appallingly wet.

The Tea Trade in the 'Forties.

The old East India Company had done quite well out of the China tea trade, always combining it with silk and general cargoes, and when the trade was thrown open there were many shipowners who saw a fortune in this particular direction. They therefore built ships which specialised in tea and carried nothing else, but they soon found that it was difficult to get full cargoes with the resources open to them. They therefore began to work underground, and many a cargo was really smuggled out of China against the Emperor's orders. This was not a very satisfactory way of doing it, for, while they were victimising the Emperor, the Mandarins usually took very good care to victimise them, so that they commenced to work for the regular opening of more tea ports. They succeeded in this, and with more opportunities the trade grew apace, although it was frequently still necessary to smuggle it in at the other end. When the duties were lightened the trade prospered wonderfully and was soon employing a very much larger fleet. This attracted the attention of the Americans, who in the early 'forties began to send out some wonderful little vessels, the first tea clippers, which carried cargoes from China to New York and Boston in times which astounded their British competitors.

The British Clippers.

With the decline of American competition the British owners began to compete among themselves so keenly that there was no risk of the design deteriorating. Steele on the Clyde, Hall at Aberdeen, and Pile at Sunderland are perhaps the best known of the clipper ship builders in Great Britain, but there were several others who turned out some remarkably successful vessels and most of the better-class British builders contrived to get a magnificent reputation for their workmanship. A clipper had to be well built if she was going to last any time, for the gruelling that she got being driven at high speed through any sea was terrible and was really most unfair to any ship. That is why their lives on the racing trades were comparatively short, but at the end of them they were generally fit to be used for a variety of purposes until finally they came down to carrying timber or coolies.

The Coolie Trade.

Many of the famous clipper ships of this time drifted into slaving, or what was scarcely better, although regarded as more respectable, the coolie trade. Many of them still claimed the protection of the British or American flags, but they were mostly Spanish or Portuguese owned and manned. One such ship was the *Bald Eagle*, one of the best-known of the American clippers, which dropped down into the lowest stage of the coolie trade, taking native workmen to the Chincha Islands off the coast of South America, whence none ever returned. The Chinamen were kept below, but on this voyage they appear to have been planning mutiny and at a given signal they suddenly tore up the bunks and bulkheads to make weapons and rushed the deck. The Portuguese crew were just in time to get gratings over the hatches, when the captain and his officers brought out their revolvers and started firing into the surging mass of coolies beneath them. It seems that the flame from one of the revolvers set light to a Chinaman's clothes, whereupon they all dashed at the burning material and, keeping it alight in spite of the efforts of the officers, succeeded in setting the ship on fire. This was done either in a suicidal frenzy or else to force the Portuguese to release them. After making efforts to put out the fire by pumping water through the deck, the Portuguese crew abandoned the ship, leaving the terrified Chinamen battened down to be roasted alive in the inferno that they had themselves created. The crew attempted to reach Manilla, and after terrible hardships the survivors were rescued by H.M.S. *Rattlesnake*.

The Great Tea Race of 1866.

Probably the finest of all the tea races home with the new season's tea was that of 1866, when the *Ariel*, *Taeping* and *Serica* practically tied. The *Ariel* was the first to leave the Pagoda Anchorage, but she lost time owing to her tugs and before she got clear the *Taeping* and *Serica* were up to her with the *Fiery Cross* rather farther ahead. The *Taitsing* was close on their heels. There was a big fleet after them but these were the only ones that it is necessary to mention. The ships had the usual tricky winds and tides running down to Anger and *Ariel* and *Taeping* contrived to make up the lead which had been gained by the *Fiery Cross*. It was pure luck, however, and one after the other the ships forged ahead or dropped astern with every inch of canvas set that could possibly be contrived. Once clear, however, they made better progress, the *Fiery Cross* taking ten days from Anger to Mauritius, the *Ariel* and *Taeping* eleven, and the *Serica* twelve. They then began to lose sight of one another until they got into the English Channel when the *Ariel* sighted the *Taeping* while they were both racing up under as much canvas as they could possibly carry. By the time they took their pilots aboard at Dungeness it was only a matter of who should get the best tug in the Downs. Here fortune favoured the *Taeping* and the *Ariel* lost a good deal of time on the way to Gravesend, where she took a second tug and commenced to gain again. Finally the *Taeping* entered the London Docks twenty minutes ahead of the *Ariel* at the East India Docks and it was agreed that they should share the credit.

They did not know then that the *Serica* had been creeping up on the French side of the Channel and entered the West India Dock only a short time after them.

James Baines.

The first man to appreciate Donald McKay's genius in England, and to import American-built ships from his yard was James Baines. Starting in a very small way he had contrived to borrow enough money to purchase a very unpromising-looking Canadian ship at a low price. He did well out of her in the Australian trade and soon found no difficulty in getting backers who would finance his schemes. He believed in the Australian trade all the time and before long he had a hundred ships running on it. These ships were among the most successful on the run but he was not a particularly good business man. He ran soft-wood ships for all they were worth and did not allow sufficiently for depreciation; he got the idea that auxiliaries would pay well on the Australian trade and lost a lot of money by his belief, and finally he lost most of his capital by the failure of Barnard's Bank. But in ten years he had made a huge difference to British shipping. He lived another thirty years in straitened circumstances or positive poverty, but he was never able to get on his feet again and he died in obscurity. Popular, shrewd and as honest as the day, the meteoric career of James Baines is one of the tragedies of the halcyon days of sail.

The "Marco Polo."

James Baines's first ship on the Australian trade was the *Marco Polo* which had been built in New Brunswick and which was apparently one of the ugliest ships ever put afloat. Baines had faith in what he could do with her, however, and fitted her for emigrants in a very much more elaborate manner than had been usual up to that time. He put her under the command of James Nicol Forbes—"Bully" Forbes—and he certainly made her travel. Liverpool shipowners of experience shook their heads and thought that young Baines was bound to ruin himself, but she did so well on her first voyage that he was able to buy other ships and was soon established at the head of his particular tree. While she made James Baines's reputation she also made that of Captain Forbes, with the result that he was the crack man on the Australian service until he wrecked his career by his conduct on the occasion of the loss of the *Schomberg* which was meant to break the Australian record but which came to grief on her maiden voyage.

The Australian Records.

Nearly all the Australian records were made on the outward passage, when the clippers not only carried big crews but frequently doubled them by men who were working their passage with the idea of making their fortunes in the goldfields. Speed was not so important coming home so that they could manage with a very much smaller crew, and a very mixed crew it generally was. As soon as the anchor was down in Australian waters the men began to desert and the ship would generally take in her cargo manned entirely by her afterguard and per-

haps one or two apprentices. Before her time came to sail there were generally a good many disillusioned gold miners who had gone out to seek their fortune and who had found only hardship and disappointment. Such men were generally very glad of a chance of getting home and although they stood out for Australian rates of pay it was very unusual for a ship to be left in Australian waters for lack of men, as was so frequently the case in California.

The "White Star."

While James Baines went to Donald McKay for his Australian clippers the rival firm of Pilkington and Wilson who maintained the White Star Line went to New Brunswick and obtained the *White Star* in 1854. She was a big ship of over 2,300 tons and she was a magnificent vessel. She was more remarkable for repeated passages that were not quite records than for any epoch-making run and in 1866 she was sold with the rest of the company's sailing vessels. After that she changed hands several times and was finally wrecked on the Tuskar owing to her master having mistaken the lighthouse for a star.

The Aberdeen Line.

The Aberdeen Line which owned some of the most famous of the clipper ships on the Australian run commenced operations in November, 1825, when George Thompson of Aberdeen set himself up as a ship-broker and agent. He was then thirty-one years of age, but he had the courage of his convictions and it was not many weeks before he collected a syndicate round him and with three ships the *Amity*, *Mansfield*, and *Sir William Wallace* went into the Quebec trade, taking out emigrants and bringing back timber. Soon afterwards the brig *Childe Harold* was placed on service and soon proved herself a success, but it was not until the late 'forties that the Aberdeen Line went into the Australian service with a regular schedule, a convenience that was very much appreciated by shippers and which made the name of the company. It was no use advertising such a thing unless the sailing ships could maintain it, however, and Thompson set himself to get the best on the market. He still retained some interest in the China tea trade but Australia was the gold mine on which he had set his eyes. The Aberdeen Line's sailing ships, with their typical green hulls, held the field until the 'eighties and even then did not disappear entirely for some years. The company's steamers still maintain the reputation then built up.

The "Thermopylae."

An Aberdeen clipper which certainly deserves full mention as being the great rival to the *Cutty Sark* for the title of the fastest sailing ship ever built is the *Thermopylae*, which was really designed for the Australian trade but which spent a good deal of her time on the China run. She was built in 1868 to the designs of Bernard Weymouth, a well-known naval architect, who was also known for his work as Secretary of Lloyd's Register. Her famous commander was Captain Kemball and her maiden voyage was 63 days. Her sail plan was very

much more square than had been the fashion before her day and this proved entirely successful. This passage is the one that is so often recorded as "Sixty days to Melbourne," but this time was pilot to pilot, her actual passage being 63. She did magnificent service in the Australian trade and was finally sold to the Portuguese Navy as a training ship, ending her days as a target for torpedo experiments.

The Famous "Cutty Sark."

Perhaps the most famous of all the clippers was the *Cutty Sark* which was built for old John Willis in 1869 at Dumbarton. She really marked the last of the clippers' opportunities, although she was not quite the last of the clippers, for in the same year the Suez Canal was opened and gave the steamer an advantage which nothing could equalise. The *Cutty Sark* had a gross tonnage of only 921 and in spite of bad weather on her maiden voyage she soon proved herself remarkably fast. She was intended to rival the *Thermopylae* but at the start of the only actual race that could be arranged between them, from Shanghai home, the weather prevented any smart sailing, and when finally the wind did come the *Cutty Sark* had the bad luck to lose her rudder. Captain Moodie immediately constructed a most ingenious jury rudder from a spare spar 70 feet long, and when it was carried away he rebuilt it. In spite of the time wasted constructing these rudders, and the necessity of nursing her all the way home she was only seven days astern of the *Thermopylae*, so that although in black and white the Aberdeen ship has every claim to the title of the fastest of the clippers it is morally certain that the *Cutty Sark* would have beaten her hands down had she not met with such exceptionally bad luck. She was essentially a ship which needed the most careful handling, for when Captain Moodie left her in 1872 she did nothing until Captain Woodget took her over in 1885. She then proved that she had all her old speed, but in 1897 she was sold to the Portuguese and it was only a short time ago that she returned to British waters owing to the practical patriotism of Captain Wilfred Dowman and his enthusiastic wife. She has been completely rerigged in her original style and now lies at Falmouth, a thing of exquisite beauty and an object lesson of all that was meant by the old tall ships.



(Macpherson Collection)

VIEW OF HONG KONG AND HARBOUR LOOKING WEST FROM MURRAY'S BATTERY, 1846.
(FROM A LITHOGRAPH BY A. MACLURE AFTER M. BRUCE)

First occupied as a naval base in the China War of 1840 Hong Kong remained in British hands after the peace, and became the centre of British trade in the Orient.



THE BRAZILIAN WAR STEAMERS "COLOMBO" AND "CABRAL," BUILT BY J. & G. RENNIE, OF LONDON,
AND ARMED BY WHITWORTH
(FROM A COLOUR LITHOGRAPH BY AND AFTER T. G. DUTTON, PUBLISHED 1866)

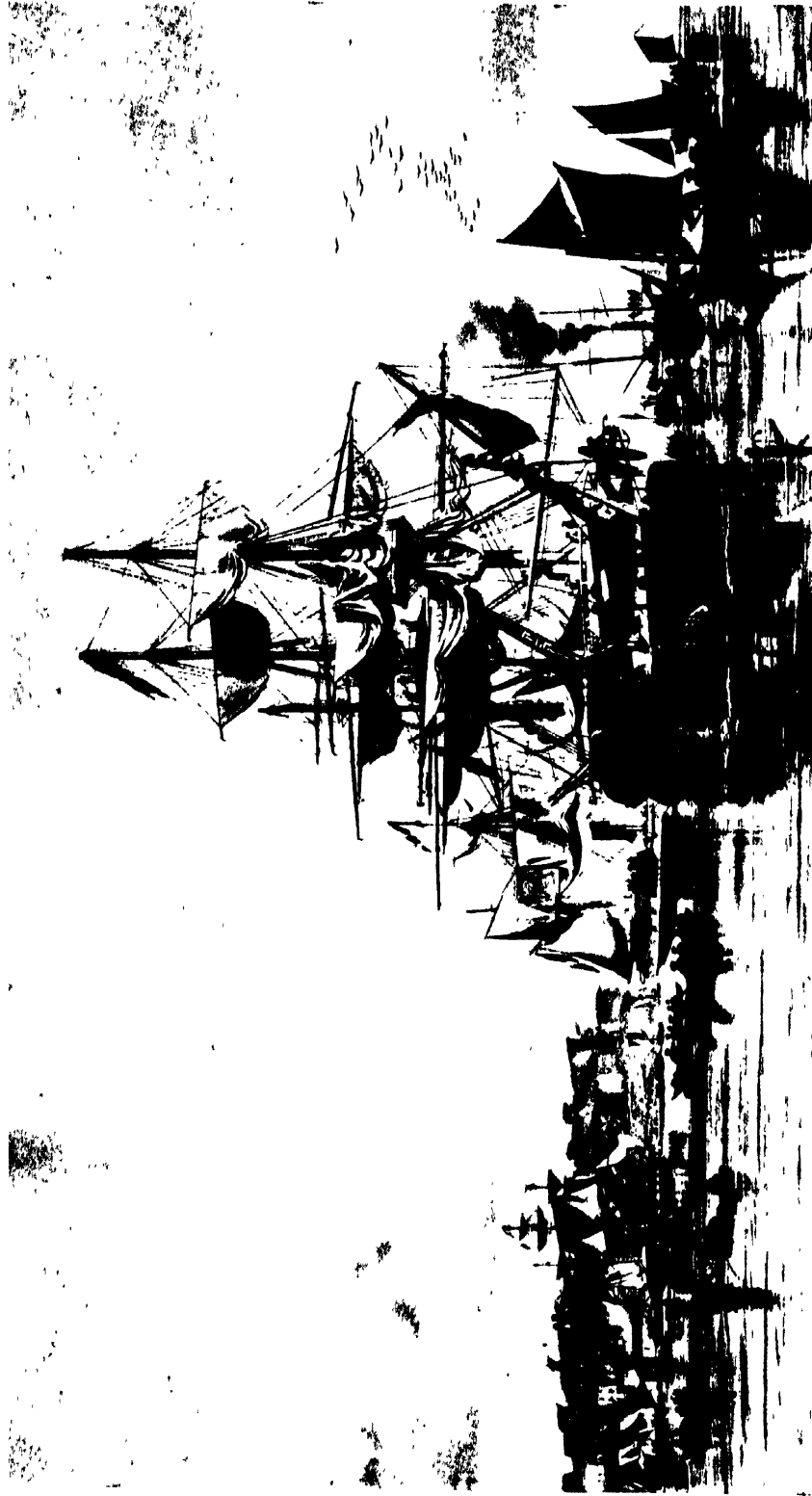
*The Brazilian Navy adopted ironclads early, but for years they
were checked by the tiny navy of Paraguay.
(From a print lent by Messrs. T. H. Parker)*



(Macpherson Collection)

THE "CAESAR," WEST INDIAN, AT GEORGETOWN, DEMARARA, SEPTEMBER, 1839
(FROM A COLOUR AQUATINT BY C. ROSENBERG AFTER W. J. HUGGINS)

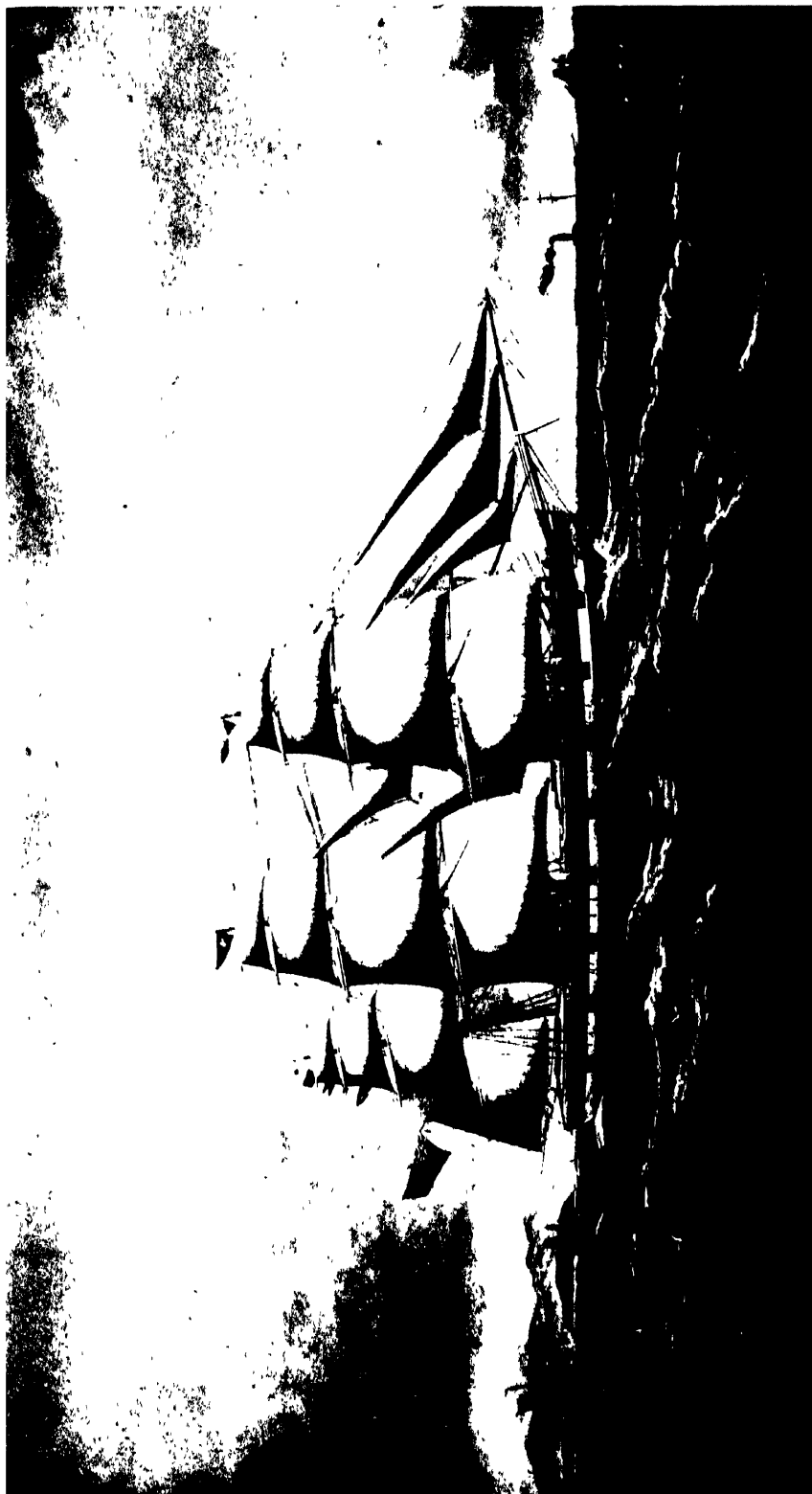
The West Indianmen were very much smaller than the famous East Indianmen, but they were wonderful little vessels, and made some excellent passages.



EMIGRANTS DISEMBARKING AT SYDNEY COVE, N.S.W.
(FROM A COLOUR LITHOGRAPH BY T. PICKEN AFTER O. W. BRIERLY)

(Macpherson Collection)

From the earliest times the authorities in Australia endeavoured to encourage free emigrants in addition to the convicts, but it was not an easy task until the discovery of gold.



(Macpherson Collection)

THE PACKET SHIP "MONTEZUMA," 462 TONS, BUILT 1846 AT QUEBEC
(FROM AN OIL PAINTING BY J. HEARD, CONTEMPORARY.)

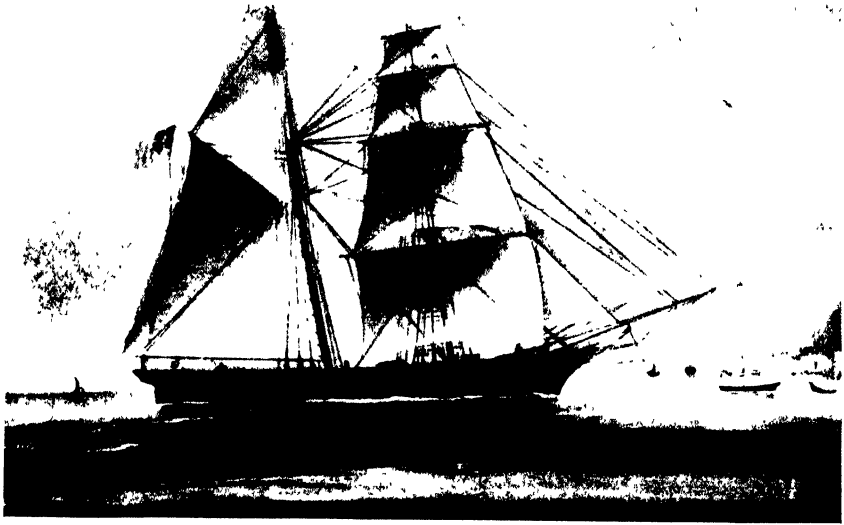
Some of the Atlantic packet ships were not by any means clippers, nor does their tonnage appear to have been sufficient to carry the large number of emigrants that were stowed into them.



acpherson Collection)

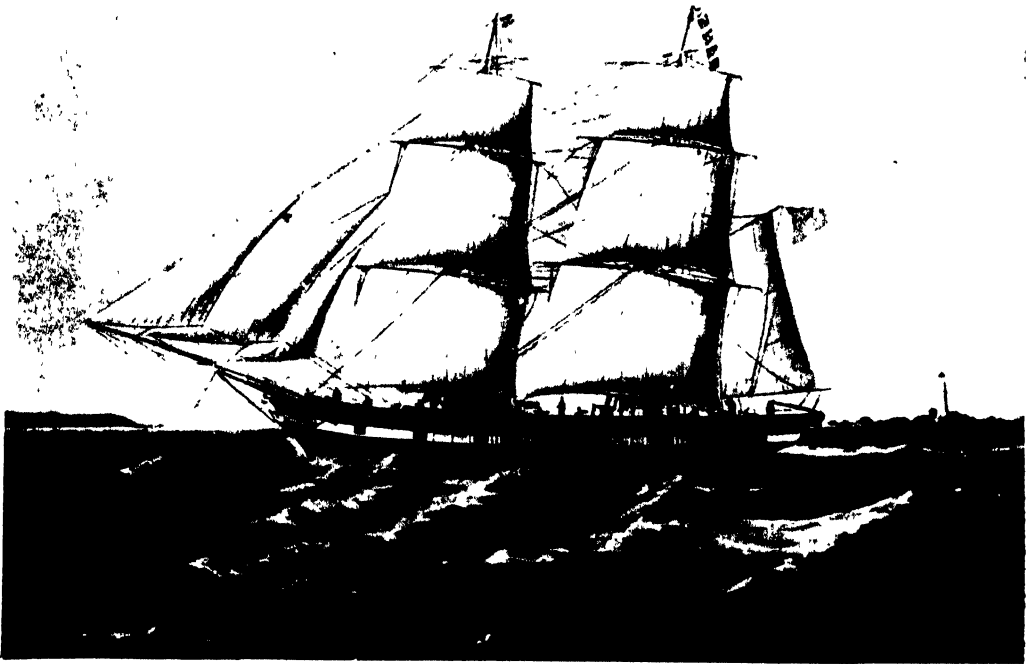
THE WHITE STAR CLIPPER "RED JACKET," BUILT 1853
(FROM A COLOUR LITHOGRAPH BY J. R. ISAAC, AFTER SAMUEL WALLIS)

Revelry with the famous clipper ships turned out by Donald McKay forced the other builders and owners to design their ships on more extreme clipper lines.



(Macpherson Collection)

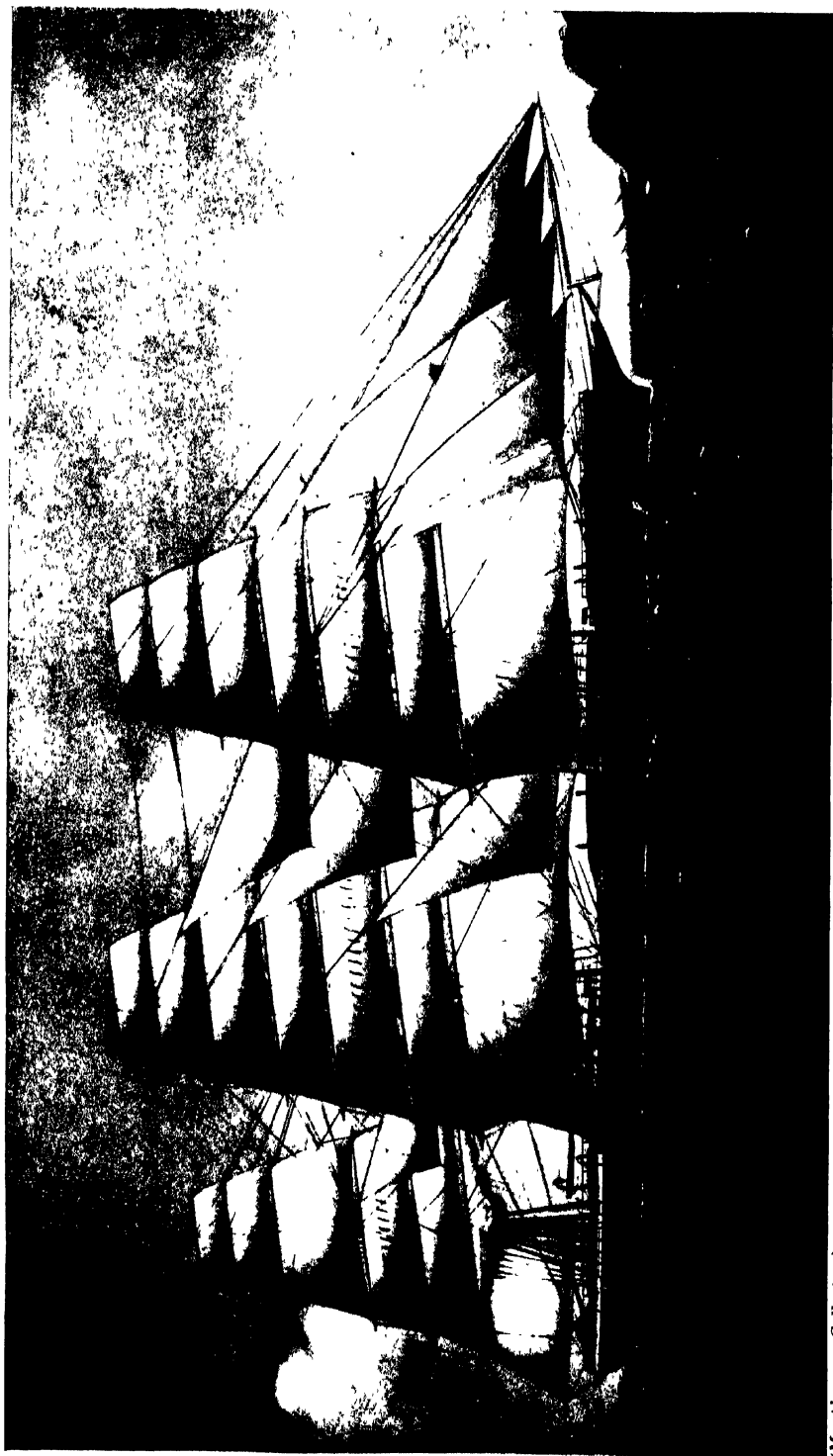
THE "PEARL," OPIUM CLIPPER, BUILT AT CALCUTTA, 1831
(FROM AN OIL PAINTING, CONTEMPORARY)



(Macpherson Collection)

THE SNOW "BOOMERANG," BUILT AT DUNDEE, 1854
(FROM AN OIL PAINTING BY S. WALTERS, 1856)

Schooners, brigantines, brigs and snows were very often built for speed for certain trades.



(Macpherson Collection)

"THE TWEED," FORMERLY A PADDLE FRIGATE OF THE EAST INDIA CO., AFTERWARDS RUN AS A SAILING CLIPPER BY JOHN WILLIS
(FROM AN OIL PAINTING, CONTEMPORARY)

Before John Willis bought her and converted her into a most successful sailing ship, The Tweed had already earned for herself a high reputation as a paddle frigate in the old Indian Navy.

CHAPTER XXXI

The Spread of Steam

The Foundations of Success.

At the end of the last period there were many who dreamed of the whole of the sea's surface interlaced with steam services, but there were many who condemned such ideas as fantastic. But the sound foundation that had been laid in the various coasting services paved the way to success, for there was very little difference between the ship which ran from the Thames to the Forth and those which ventured across the Atlantic or to India, and the vessels which plied on the Hudson were only one short step behind those which established the long coasting trade.

The Voyage of the "Enterprise" to India.

The history of the voyage of the little steamer *Enterprise* to India is rather a curious one. In 1822 it was proposed to establish a company for the purpose of maintaining a steam service to India, and the promoters sent out Lieutenant J. Johnston, R.N., to stir up all the popular enthusiasm that he could. He certainly succeeded, and in two years the public of Bengal raised 80,000 rupees, the Rajah of Oudh contributing 12,000. To this sum the Government of India added another 20,000, so that there was a tempting prize offered for the first steamer that could contrive two round voyages to India and back before 1826, the stipulated time for each passage being 70 days. The *Enterprise* was a little steamer of 479 tons, a barque-rigged wooden paddler which had already been laid down at Deptford, and as soon as they heard of the prize that was offered the promoters of the company immediately bought her. So she was two-thirds finished when Johnston returned to England and immediately saw that she was not by any means suitable for the work. Her dimensions were 122 feet by 27, she had an engine of 120 horse-power which gave her a maximum speed of 9 knots, but which was far more likely to work out at 6 or 7, and she consumed 10 or 12 tons of coal per day in doing it. She was finally completed at a cost of £43,000, so that, in spite of her unsuitability, she had to be used for the attempt. Lieutenant Johnston was put in command and, with 17 passengers and coal stowed wherever a place could be found for it, she sailed from Falmouth on August 19th, 1825. She finally reached Calcutta 113 days out, but of this over 10 days had

been spent coaling at St. Thomas and the Cape. She raised a tremendous stir when she made her way up the river, belching out dense clouds of black smoke, but as she was well outside the stipulated time, only half the prize was paid. Her owners had little to complain of, however, for the Government of India immediately bought her for £40,000 to take part in the First Burmese War, in which she carried despatches from Calcutta to Rangoon. They also were very well satisfied with their bargain, for it was estimated that her speed saved six lakhs of rupees by preventing the despatch of further troops after the Treaty of Malwa. In 1829 it was proposed that she should inaugurate the new passenger service between Bombay and Suez, communicating across the isthmus with the ships from England, but she broke down time and again and finally it was decided that she was far too unreliable, and the *Hugh Lindsay* was commissioned in her place.

The Start of the P. and O. Line.

The famous Peninsular and Oriental Line, which is now one of the greatest shipowning companies in the world, started in a very modest way by the charter of a number of small steamers, most of them packets from the Irish Channel run, for the mail service to Spain. The company was founded by Messrs. Willcox and Anderson, shipbrokers, who managed the Dublin steamer *Royal Tar* when she was chartered to Don Pedro of Spain and so became interested in the Spanish trade. That was in 1834 and in 1837 they drew attention to the undeniable fact that the sailing of Post Office packets which maintained a nominally weekly service between Falmouth and Lisbon were anything but satisfactory, while even the Government steamer which carried the mails to Cadiz and Gibraltar was very much inferior to the tonnage that they could put on the service. They therefore approached the Government with a suggestion that they should carry the Peninsular mails, but they were pitted against vested interests and for a time their suggestion was turned down. They persisted, and as at the time there was a public outcry against the Government mail service they were finally asked to put forward a concrete suggestion. The Government examined their plan, approved of it, and then used it as a basis for inviting competition. This the Peninsular Company, as it then was, felt was most unfair. However, the competing company could not satisfy the requirements, so that in August, 1837, they signed a contract for the conveyance of the Peninsular Mails for an annual subsidy of £29,600 per annum, which was afterwards reduced to £20,500. The *Iberia* took the first mails under this agreement, sailing in September, 1837.

The Tragedy of the "London."

One of the most terrible tragedies in the history of the sea was the loss of the steamship *London* in the Bay of Biscay in 1866. She was bound from Plymouth to Australia with emigrants and from the very beginning there were forebodings. When it was remarked that she looked uncannily like a coffin and also that her owners had decided to dispatch her on a Friday this was not unnatural. However, she had

made two voyages quite successfully. A few days out she began to make very bad weather of it, losing spars and plunging heavily in mountainous seas, her fine speed lines being ill-adapted for the Bay of Biscay. Soon water was finding its way below in considerable quantities and this made her worse. Perhaps the most unfortunate feature of her design was that the coamings of her engine-room hatches were practically flush with the deck, so that as she rolled the water found its way into the engine and boiler-rooms and put out the fires. She was then helpless and the only thing to do was to try and keep her afloat with the pumps. The finest example was set by Gustavus V. Brooke, a famous actor of the day and a colossal man, who worked magnificently at the pumps and did everything possible to encourage his fellow passengers. It is to be feared that the seamen behaved very badly, broaching some cases of liquor and working themselves into a state of drunken terror. Several Dutch members of the crew left the pumps and went below, declaring roundly that if they were to die they would die warm, and wrapping themselves up in their blankets to be drowned like rats in a trap. Finally she took her last plunge, carrying down her whole company with the exception of sixteen. Among the victims were six stowaways. The disaster caused engine-room hatches to be trunked up in modern fashion.

The "Golden Age."

In the 'fifties of the last century the Panama Canal was not constructed or even dreamed of except by a few far-sighted visionaries, but the American paddle steamer *Golden Age* proved the possibility of the Transpacific route between Australia and Britain. Her first passage was across the Atlantic to Liverpool, where she attracted a good deal of attention by the fact that she was given a straight stem instead of the usual clipper stem and bowsprit, thus following the example set by the Collins Line. She then went out to Australia, making a very fast passage. Leaving Sydney in May, 1854, she took on board 1,200 tons of coal at Tahiti—incidentally having to pay such a high price for it that the voyage resulted in a financial loss—and then sailed to Panama. Her 200 passengers with the mails and gold valued at a million pounds were sent across the Isthmus to the Royal Mail Steam Packet Company's steamer *Magdalena*, which was waiting for them at Chagres. Thus for the first time the mail passage between Sydney and London was reduced to 67 days. Later, sailing ships were to get very near this record, but when it was made it aroused great excitement.

The First Steamer in China.

The first steamer recorded as having visited Chinese waters was the *Jamesina*, which was sent out from Bombay. She went up to Canton, taking her pilot on board at Lintin. The story goes that all the ship's officers were keenly anticipating some amusement out of the old Chinaman introduced into such a novel ship, but he refused to betray the least curiosity. Finally they could not restrain themselves and pointedly asked him the question, whereupon they received the surprising answer that the Chinese had known steam for a long time but they did not

consider it to be really worth while and had abandoned it as old-fashioned.

The "Sea King."

A particularly interesting auxiliary was the *Sea King* which was designed for the tea trade to China, a composite ship of just over a thousand tons, with a fine turn for speed under sail alone with her propeller lifted and ample power to move her in a calm. Her engines were of 200 nominal horse-power, which was big for an auxiliary. She did the run from Shanghai in 79 days, with five days wasted for coaling, which was a magnificent passage and made her reputation. In 1864 the Confederates bought her as a blockade runner and later commissioned her as a corsair under the name of *Shenandoah*. For this service she was under the command of Captain James Tredell Waddell, who had already distinguished himself in command of the ironclad *Louisiana* against Farragut. He commissioned the *Shenandoah* in 1864 and took her to Melbourne, destroying Northern ships all the way round, after which he went up to the North Pacific and made hay of the American whaling fleet there. As a matter of fact he continued his depredations some time after peace had been declared, but he did not know that. When he heard of it he did not surrender his ship with the rest but sailed her to Liverpool where he handed her over to the British authorities, an act which caused them a good deal of embarrassment. The old *Shenandoah* finally foundered while she was owned by the Sultan of Zanzibar.

The Royal Mail Steam Packet Company.

The Royal Mail Steam Packet Company, which is one of the best known under the British flag, started in 1838 with Mr. James McQueen, who was a company promoter with a particularly keen interest in shipping matters. He contrived to interest a number of London merchants in his scheme for a steam service to the West Indies and in 1839 obtained a Royal Charter. The first capital of the company was 15,000 shares of £100 apiece, with £50 called up, and in 1840 he contrived to get a mail agreement with the Government. This contract was for a term of ten years and the company undertook to provide a fleet of approved steamers to maintain two sailings a month. Sailing vessels were to maintain inter-island communication in the West Indies. In return for this they were to receive a subsidy of £240,000 per annum, with a possible £60,000 more, but with very heavy penalties for any failure to comply with the terms. To begin with they ran in naval fashion, all their ships being commanded by naval officers and all their officers being given the right to wear swords—which were sadly in the way while tallying cargo. They very soon found it impossible to make the service pay, for it was a very expensive matter to run steamers in those days, but finally they obtained various concessions in their contract and in the late 'forties they turned the corner. When the Pacific Steam Navigation Company started on the other side of the Isthmus of Panama they organised a service overland to connect with their steamers. The

Admiralty still maintained a very considerable say in their affairs and it was not until 1853 that they were permitted to build iron ships. By pursuing a steady, conservative policy the R.M.S.P. made themselves one of the most important shipping companies in the world, although of course the nature of their service prevented them from building such spectacular vessels as were to be found in the North Atlantic.

The R.M.S.P. and South America.

After they had worked the West Indian mail service into a very efficient condition the Royal Mail Steam Packet Company decided that they could go further afield, and the British Government was only too willing to entrust them with the carriage of mails to South America. In June, 1850, the agreement was signed by which the company agreed to maintain two sailings a month to the West Indies and one to the River Plate by way of Brazil. For this extra service their subsidy was increased by £20,000 a year only, and they were forced to build at least five new steamers. Two of these never took a sailing, the *Amazon* being burned on her maiden voyage with terrible loss of life and the *Demarara* being wrecked in the Severn on the way down from her builders' yard. In 1860 the Government demanded an improved service and although this was granted it did not prevent them from putting the tender up for competition two years later. The mail contract was renewed time after time, each occasion demanding a better service for a smaller subsidy. The ships of the Royal Mail Company were expensive to build and maintain, and for many years they were tied helplessly by Government requirements.

The Pacific Steam Navigation Company.

The Pacific Steam Navigation Company is regarded as an essentially British concern, yet the principal credit for its foundation must be granted to an American, a Mr. William Wheelwright, who was the U.S. Consul at Guayaquil. He made up his mind that there was big money to be made by developing the steamship possibilities of the Southern Pacific, and although he had a very disparaging precedent, he pressed on with his scheme. This precedent occurred in 1825, when a Spanish Jew named Mitrovitch took a small steamer named the *Telica* out to the west coast of South America. His great handicap was the difficulty of obtaining fuel, and this caused such irregular sailings that people began to complain. Finally he became tired of these complaints and, firing a pistol into a barrel of gunpowder while his ship was lying in the harbour of Guayaquil, he blew up the ship, himself and all the complaining passengers, with the exception of one man who managed to swim ashore. As far as the supply of coal was concerned, things were not very much more satisfactory when Wheelwright started his scheme in 1840. He first tried to obtain financial support in the United States, but, failing in this, he went across to England and not only obtained the capital but also a charter and a small subsidy for carrying the British mails along the west coast of South America. He started with a capital of a quarter of a million pounds and two small

steamers, the *Chili* and *Peru*. These were vessels of only 700 tons register, but the best that had yet been seen in the South Pacific. The P.S.N. Company had to contend with many difficulties, but obtained a supplementary charter in 1846, and in 1850 a renewal of the mail contract on such terms that it was able to build new and greatly improved tonnage and to put things on a thoroughly satisfactory footing which carried the company, in spite of reverses and many discouragements, well into the present century.

The Suez Canal.

The opening of the Suez Canal in 1869 made a huge difference to the world's commerce, and marked the end of the halcyon days of sail. It avoided the long sea voyages in which coaling was a great difficulty and it reduced distances very considerably. Some six hundred years before Christ Necho had commenced to build a canal and although it was never completed 120,000 men are said to have died in the work. Darius attempted to continue it. Various other rulers tried to make a navigable canal but it was never a great success and was finally filled in by order of the Caliph on the ground that it was assisting his enemies in Arabia. In the fifteenth century the Venetians attempted to arrange for the construction of a canal; Louis XIV had the same idea, and many Egyptian rulers repeated it before Bonaparte in his campaign in Egypt had a survey carried out. It was in 1854 that Ferdinand De Lesseps, a French Consular official, interested himself keenly in the work and although he was not supposed to be a practical engineer he soon surmounted difficulties and obtained a concession. This concession was to last 99 years from the opening of the canal, after which it was to pass into the hands of the Egyptian Government. In spite of all difficulties the Canal was finally cut and opened by the Empress Eugénie in her yacht *L'Aigle* in November, 1869. Within a year 500 ships had passed through it.

The Isthmus of Panama.

The pioneers in Central America always believed that there was a waterway between the Atlantic and the Pacific, and they spent many weary months searching for it. It was not until 1530 that they finally satisfied themselves that there was no way through and immediately plans for cutting a canal were formulated. A cousin of Cortez, one Alvaro Ceron, prepared plans for the construction of the canal, choosing practically the same route that the waterway takes to-day. Charles V of Spain encouraged the project; Paterson had the same idea in mind when he founded the Darien Colony; Nelson considered the matter when he was in Central America in 1780; and in the early days of the nineteenth century there was infinite discussion concerning the rival claims of the Panama and Nicaragua routes. The Dutch commenced work on the latter in 1829 but it did not go far. In 1846 the United States considered the matter and also favoured the Nicaraguan route, and in 1850 the famous Clayton Bulwer Treaty put the matter on a fairly satisfactory basis. However, work was not really started in

earnest until De Lesseps commenced his famous but ill-fated attempt in 1881.

The Steamship in Japan.

When Lord Elgin made his commercial treaty with Japan in 1858, he presented a steamer, the *Emperor*, from Queen Victoria to the Mikado. Three years later, in 1861, the Prince of the Satsuma, a clan which regarded itself as the monopolists of naval affairs in Japan, purchased two steamers for trading purposes. They were named the *England* and the *Scotland*, and had a gross tonnage of round about 1,100. Not unnaturally, the handling of native mechanics caused a good deal of boiler trouble, but the wonderful ingenuity of the people was shown by the way they gave the *England* new copper boilers within 12 months of her arrival. She was sunk by the British after the bombardment of Kagosima in 1863. One widely accepted explanation of the word Maru, which follows the name of every Japanese merchant ship, is based on one of its many meanings, "round." The story is that when the Japanese received their first steamer, they were quite confident that they could run her, but unfortunately they were not sure about stopping her engines. So they just raced her round and round Yokohama Harbour until the steam gave out, and they then towed her to her berth in triumph. There are other explanations of the word, and it is a matter of constant discussion.

The "Bessemer."

Probably the most extraordinary vessel ever constructed was built in 1875 to the combined designs of Mr. E. J. Reed, the chief constructor of the Royal Navy, and Mr. Bessemer, the steel inventor. Her principal feature was that she had a saloon amidships that was designed to remain on a level keel no matter how much the hull outside it rolled and pitched. Unfortunately the result was that the hull took one motion and the swinging saloon another, giving the passengers inside a terrible time. She was also fitted with two sets of paddles, but the obvious result of this was that the after pair worked through water that was already moving fast from the forward pair, and were quite useless. To save weight she was given low freeboard forward, but this only collected a colossal weight of water. The result was that she was slow, uncomfortable and practically uncontrollable, and consequently her life on the Channel ferry was short and inglorious. Her famous swinging saloon, however, is still in existence as the dining-room of an English country house.

CHAPTER XXXII

Policing the Seas

The Last Days of Piracy.

The nineteenth century saw the last days of piracy on a big scale, although it is still to be found in certain parts of the world and probably will be till the end of time. As has been shown in earlier chapters, the old-time pirate was very often quite a decent fellow who had been forced out of the merchant service by the appalling conditions obtaining therein, and had turned to piracy as a means of existence and nothing more. In the early days of the nineteenth century, however, the pirate was at his very worst, for the horde of adventurers of all sorts who had taken service in the navies of the various South American States against the domination of Spain found that they had nothing to do when the work of liberation was done, with the result that they simply took to piracy. Those were the days of real savagery, and if there really is an authentic instance of a victim being made to walk the plank it was certainly in those days.

Tatnall and the Mexicans.

Josiah Tatnall was also concerned in several exciting incidents with the Mexicans. In August, 1842, the Mexican naval schooner *Montezuma* boarded an American merchantman at sea, maltreated the crew and seized certain goods, this being nothing but piracy. The U.S.S. *Grampus* under Tatnall gave chase and captured her within range of the forts at Tampico. Tatnall acted entirely on his own responsibility and knew the trouble that would be his if he were disallowed. A few weeks later he sailed boldly into Tampico and rescued an American schooner which the Mexicans had illegally detained, obviously awaiting some excuse to seize the 200,000 dollars in specie which she had on board at the time.

The Mochan Pirates.

In practically all the eastern lands piracy was regarded as quite an honourable profession, and it became the business of the British Navy to rout out settlement after settlement. In 1820 H.M.S. *Topaze*, with several ships belonging to the East India Company, tackled the pirates whose headquarters were at Mocha. A landing party was very severely handled by the pirates, so it became necessary to bombard their fort and



(Macpherson Collection)

THE "GREAT WESTERN" LEAVING BRISTOL FOR NEW YORK, APRIL, 1838
(FROM A COLOUR AQUATINT BY REEVE AFTER A PAINTING BY JOSEPH WALTER, BRISTOL, PUBLISHED 1840)

Although she was beaten in time of arrival by the little Sirius, the Great Western was by far the better ship of the two and made the better time across the Atlantic.



(Macpherson Collection)

THE "ROYAL WILLIAM" IN MID-ATLANTIC ON HER FIRST VOYAGE TO NEW YORK, JULY, 1838
(FROM A COLOUR LITHOGRAPH BY T. FAIRLAND, AFTER A PAINTING BY S. WALTERS FROM A SKETCH TAKEN AT THE TIME)

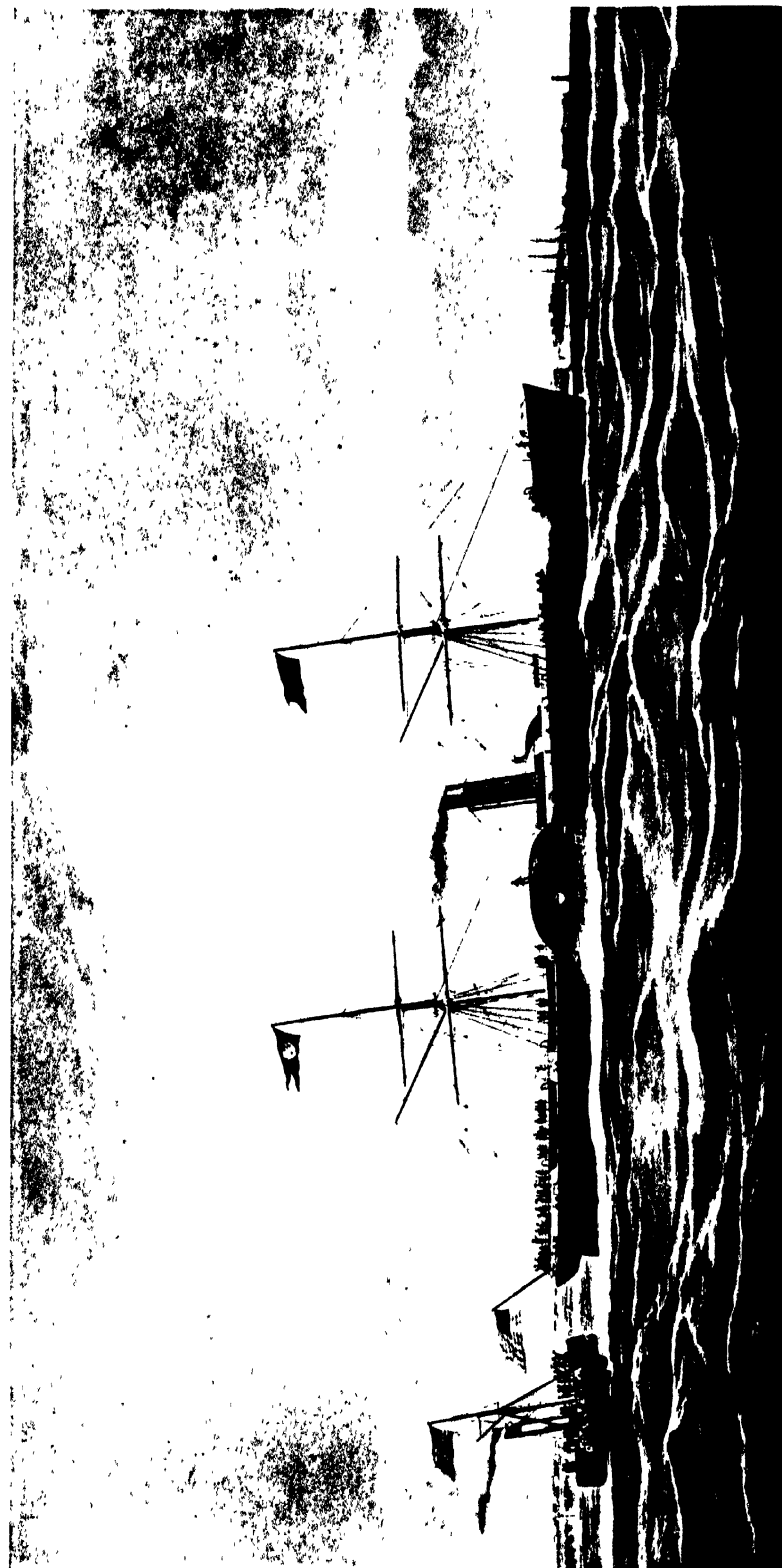
The Royal William that sailed to New York in 1838 is not to be confused with the little Canadian-built steamer which had already crossed the Atlantic under steam.



LAUNCH OF THE "GREAT BRITAIN" AT BRISTOL, JULY 19, 1843
(FROM A COLOUR LITHOGRAPH BY PUCK, AFTER JOSEPH WALTER)

(Macpherson Collection)

So well was she built that the famous Great Britain is still in existence in the Falkland Islands as a hulk. Not having any official name for her six masts they called them after the days of the week, it being very truly said that there was no Sunday at sea in those days.



(Macpherson Collection)

THE S.S. "ATLANTIC," PIONEER OF THE COLLINS LINE. LEAVING THE MERSEY FOR NEW YORK
(FROM A PROOF LITHOGRAPH IN COLOURS BY PICKEN AFTER S. WALTERS, 1855)

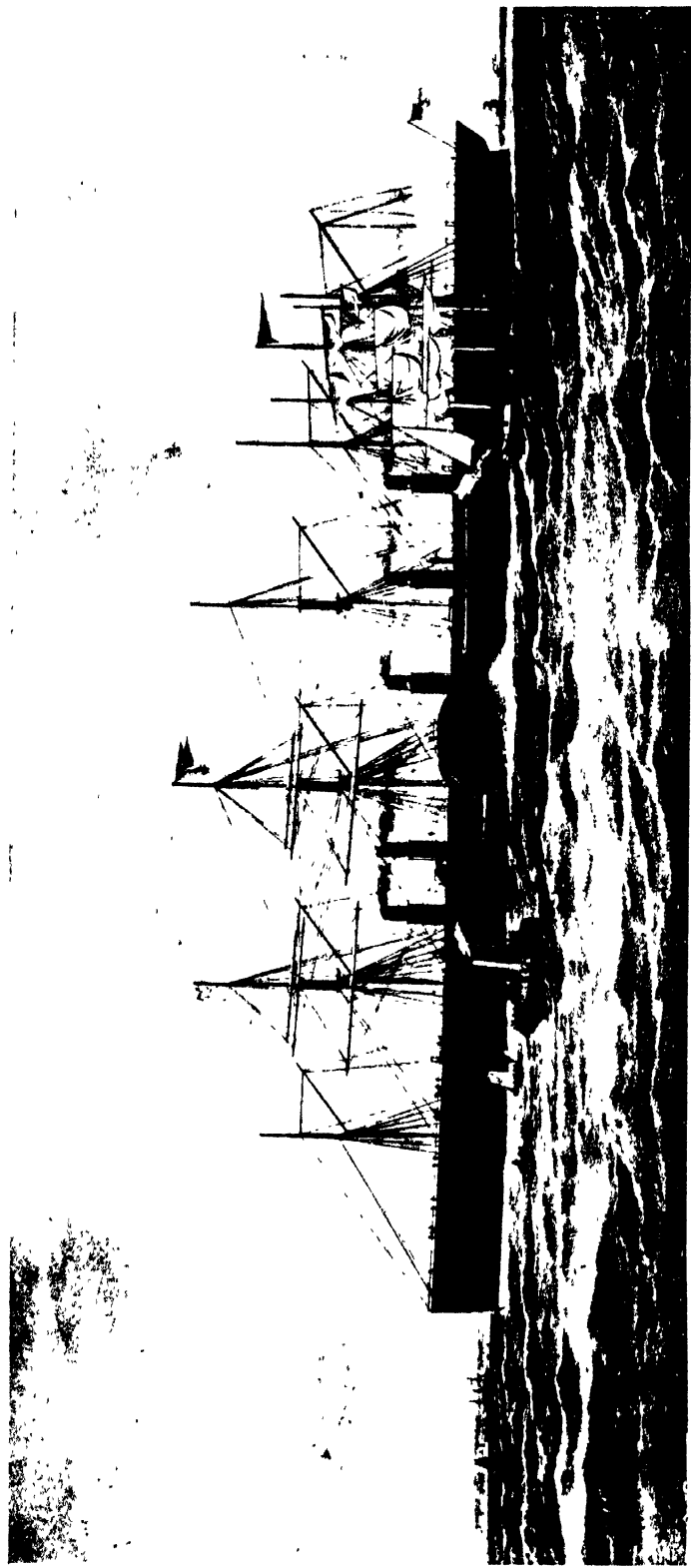
Typically American in design, the ships of the Collins Line were the most elaborately fitted vessels at sea in their day, and maintained the Stars and Stripes on the Western Ocean until their subsidy was suddenly withdrawn.



(Macpherson Collection)

THE WHITE STAR STEAMER "BALTIC," BUILT AT BELFAST IN 1871
(FROM AN OIL PAINTING BY A. JACOBSON)

In the ships which they built for the White Star Line in the early 'seventies Messrs. Harland & Wolff, of Belfast, introduced to a surprised shipping world the entirely new ideas of construction to which they have adhered ever since.



(M. J. Pherson Collection)

THE "GREAT EASTERN" STEAMSHIP

(FROM A COLOUR LITHOGRAPH BY PICKEN AFTER A PAINTING BY S. WALTERS, PUBLISHED 1857)

One of the most famous failures ever built, the Great Eastern might well have succeeded had her original owners not failed before she was completed, her purchasers putting her on to service for which she was never designed and for which she was most unsuitable.



(Macpherson Collection)

H.M. BRIGANTINE "BUZZARD" CAPTURING THE SPANISH SLAVE BRIG "FORMIDABLE"
ON THE COAST OF AFRICA, DECEMBER 17, 1834.
(FROM A COLOUR AQUATINT BY E. DUNCAN AFTER W. J. HUGGINS)

Only occasionally did the slavers, who generally sailed under the Spanish, Portuguese or French colours, attempt to put up an armed resistance, but as a rule they were built expressly for speed.



H.M.S. "ASSISTANCE" AND "PIONEER" IN WINTER QUARTERS, JANUARY, 1853.
The moon is up, the sun below the horizon. The shadows are cast from the moon.



PERILOUS POSITION OF SHIPS IN DISASTER BAY, 12 OCTOBER, 1853.
 (FROM LITHOGRAPHS AFTER SKETCHES BY COMMANDER W. W. MAY)
 (Lent by Messrs. T. H. Parker)

*Both illustrations represent incidents in one of the expeditions sent
 in search of Sir John Franklin.*

reduce the whole place. Several other pirate centres were treated in like fashion before the lesson was learned.

Smuggling after the Peace.

The final peace which concluded the Napoleonic War made a huge difference to smuggling, for until then the authorities had so few men at their disposal that the smugglers were able to do very much as they liked. When the forces came to be disbanded there were some men who had such a strong claim on the Government that they could not be fobbed off with a beggar's licence or anything of that sort, and they were therefore employed in running down the smugglers. The finances of the country were in a very serious condition, which was another reason for tightening up the Customs guard. The first move in the campaign for efficiency was to take the revenue cruisers out of the hands of the Board of Customs and put them under the Admiralty, a move which was ordered on April 5th, 1816. Although the British Navy was cut down to its lowest ebb, there were still a number of ships in commission, and these were ordered to co-operate with the cutters. The Admiralty, however, would not go further than to make an effort at an efficient service; the bills still went to the Customs Office. The Navy took over some fine floating material and added to it some of their own craft, so that the cruisers were divided into three classes—the first class of over 140 tons, the second class between 100 and 140, and the third class of less than 100. Pay and victualling were put on a proper scale and a system of discipline introduced which soon left its mark.

The Coast Blockade.

By July, 1817, it was seen that more than ordinary measures were required to cope with the smugglers, and accordingly the territory between the North Foreland and the South was handed over to the coast blockade. This was first put in the charge of H.M.S. *Severn*, under Captain M'Culloch, who had already had considerable experience in the suppression of smuggling. His ship was well provided with boats, and a large part of his crew was landed at different points along the coast just before dusk to co-operate with their brothers off shore until the morning. This method was found to be successful, and in the latter part of 1818 it was extended from Shellness at the corner of the Isle of Sheppey to Cuckmere, just beyond Beachy Head. In 1821 this coast blockade was divided into three divisions and twelve districts, commanded by naval officers and manned by parties of reliable seamen. These seamen erected guard-houses, and finally entirely replaced the old land guard. This put an effective check on smuggling so far as one stretch of the coast was concerned, but the others had to be covered by the cutters, and very expensive work it proved.

The Patrol of the Coast.

The experiment of the coast blockade had proved so successful that in 1819 a somewhat similar organisation was established all round the coast. A number of stations were established, each consisting of a chief officer and seven hands, in charge of a sea boat pulling six oars and

rigged as a three-masted lugger. They were expected to pull along their coast line practically every night, as well as to keep a watch on shore, and to keep in closest touch with the cruisers further out. They had the right to stop and search any ship that appeared in any way to be suspicious, and to pursue any shore boat which they had any reason to believe was engaged in smuggling.

Ingenuity for Force.

These measures soon taught the smugglers to employ ingenuity instead of force, and, instead of running big cargoes close inshore and relying on their numbers to beat off any opposition the usual practice was for the smugglers to come as close inshore as they dared, drop their cargo in specially prepared cases and bags anchored to the bottom, and leave it to their friends on shore to come out at the first opportunity and recover them by dragging. So the authorities also did some dragging on their own account, and paid the men a reward for everything that was brought up out of the sea. Many ships engaged in lawful trade were specially built to carry considerable quantities of contraband in cunningly concealed hiding places. False bows, false keelsons and false bulkheads were quite common, and so cleverly arranged that they required a deal of finding. Pigs of iron ballast were cast hollow and filled with liquor.

The System of Rewards.

Until 1821 the system of rewards was a little vague, but in the spring of that year it was made definite, and there was further increase of efficiency when this temptation to corruption was removed. In 1822 the whole of the preventive organisation was put under the control of the Customs Board again, being under the command of the Controllor-General of the Coastguard. The Coast Blockade already mentioned was exempted from this order. Although the administration was back in the old hands, the entire water personnel was now naval. Then in 1831 the Coastguard was founded properly, not only to take over the Coast Blockade but also the preventive organisation, and to constitute the first reserve of the Navy. The first steam tender came into the service in 1839, and the efficiency of the coastguards steadily increased. Gradually the number of cruisers afloat was cut down and the coast-guard service ashore increased, until the Crimean War proved their national value. They were then the only real reserve that the Navy possessed and had to be relied upon almost entirely for manning the numerous ships commissioned. Political considerations prevented the use of the Press Gang, which was still legal. After the peace with Russia the Customs Board pointed out that they had to pay for the coast-guard, but that it was the Admiralty that received the great benefit, so that in 1876 it was again passed back to the control of the Navy, to remain there until 1923, when precisely the same arguments were used to pass it back to the Customs and Board of Trade.

The Decline of Smuggling.

All the measures that the authorities were taking to checkmate the smugglers had far less real effect in bringing about the decline of smuggling than the fact that it was rapidly ceasing to be worth while. Trade was no longer checked by vexatious export duties, and the authorities did all that they could to foster the purchase of British wool abroad instead of checking it. At the same time, as the financial position of the country improved after the Napoleonic war, the aim of the authorities was to cheapen living in England, and for this purpose it was obvious that import taxes had to be reduced. So the smuggler not only found that his business was more difficult, but that there was no profit in it at the end, and it rapidly declined as a regular business. There were, of course, many instances of a few cigars or a little spirits being run in by fishermen and others, and even isolated cases of smuggling on a bigger scale in the North of Scotland, but the romantic period of smuggling ended definitely in the 'forties.

CHAPTER XXXIII

Nineteenth-Century Exploration

The 1818 Expeditions.

Prompted by optimistic reports brought home by William Scoresby, the whaler, the Admiralty sent out two expeditions in 1818, the one to examine the seas around Spitzbergen and the other to investigate Davis Strait. All the work was done in whalers, which had proved themselves the most suitable vessels for this type of exploration. Accordingly the *Dorothea* and *Brent* were chartered for the Spitzbergen expedition under Commander David Buchan, the latter being commanded by Lieutenant John Franklin, who was afterwards to make such a name for himself in Arctic exploration. For Davis Strait the *Isabella* and *Alexander* were chartered and put under Captain John Ross, with a nephew of his, James Clark Ross, as a midshipman. The *Alexander* was commanded by Lieutenant William Edward Parry, so that in this expedition may be said to have been sown the seed which led to all the great Arctic expeditions for years afterwards. The expedition to Spitzbergen was early thwarted by the ice, but the Davis Strait party was very much more lucky. Baffin's Bay had long been reported, but many people doubted its existence, so that the action of the *Isabella* and *Alexander* in sailing right round it put all doubts at rest. More important in commercial circles was the fact that Ross opened the way for the whaling industry which settled itself in Baffin's Bay for many years afterwards. He also did valuable oceanographical work, but some of the theories that he formed were proved to be erroneous.

Parry's Expedition.

His second-in-command, Lieutenant Parry, disagreed so strongly with Ross that in 1819 he was himself given command of an expedition, consisting of the bomb ketch *Hecla* and the gun brig *Griper*, to substantiate his theories. One of these was that Lancaster Sound was a wide strait and not a bay, as Ross had believed. Favoured by the weather and his own judgment, he made a remarkable passage and went into winter quarters off Melville Island. It is worth noting that he had his crews perfectly well in hand through the whole of this tedious winter, whereas Ross's men were always on the verge of mutiny. In this he differed from his celebrated nephew, who was an exceedingly popular man. Parry's expedition returned in safety in the following autumn and

attracted tremendous attention.

Parry's Second Voyage.

Parry's second voyage, which was made with the *Hecla* and the *Fury*, of very similar type, was commenced in 1821 and returned in 1823. His object was to explore the region to the North of Hudson's Bay. He succeeded in his object and greatly increased the geographical and scientific knowledge of the northern coast of America.

The 1824 Expedition.

These expeditions had aroused so much interest in the country that in 1824 a combined effort was determined upon, with Parry in chief command. He took the *Hecla* and *Fury*, and the officers who went with him were the great men in the history of Arctic navigation. There was Henry Foster, James Clark Ross, Bird and Crozier, while in command of the *Blossom* was Commander Frederick William Beechey, who had already done very fine work. His business was to carry out numerous explorations in the Pacific and to meet Parry at the end of Bering Strait. Soon afterwards Franklin, who had just returned from a most trying voyage in the Arctic, was sent out to co-operate. Everything was against Parry. The worst winter that had been known wrecked the *Fury* and forced the party to return in the *Hecla*. Beechey got as far north as Cape Barrow, while Franklin did exceedingly valuable work in the North Pacific.

Parry's Third Voyage.

Meanwhile, Parry had been knighted and was now Sir Edward Parry and Hydrographer of the Admiralty, although it is difficult to see how he carried out his official duties when he was always away. However, the Admiralty were sufficiently pleased with his work to give him repeated leave of absence, and accordingly his third expedition, undertaken in 1827, was launched with the idea of reaching the Pole from Spitzbergen by means of hybrid boat-sledges. He again took the *Hecla*, and had with him Foster, Crozier, Ross and Bird, the first-named being left in charge of the ships on the north coast of Spitzbergen. Eventually the sledge party reached a point $82^{\circ} 45'$ north, where they were checked by the ice drifting southwards as fast as they advanced. This remained the farthest north for many years afterwards.

John Ross.

The Admiralty had not been inclined to employ John Ross again, since he had persisted so strongly and tactlessly that Lancaster Sound was a bay and could not be proved a waterway by any means. However, he persuaded a private party to fit out a small steamer called the *Victory*, and in her he sailed to Baffin's Bay in 1829. His nephew went with him, and they were successful in discovering a long coast line which was named Boothia Felix, after Sir Felix Booth, the gin distiller, who was his patron. The *Victory* was caught by the ice in Felix Harbour, and there she remained, while James Clark Ross, in one of his numerous land journeys, discovered the magnetic pole. The party finally abandoned the ship and found the provisions which had been

left by the *Fury* when she was wrecked in 1825, finally being picked up by whalers in Barrow's Strait in the last stages of exhaustion.

Captain George Back.

The next expedition sailed under Captain George Back, who had already carried out a voyage in search of Ross, the object of which was to reach Repulse Bay by the sea. He took out H.M.S. *Terror* in 1836, and with a magnificent crew he did his best. However, his ship was so badly damaged by the ice that she very nearly foundered coming home across the Atlantic, and only reached Lough Swilly in time to be beached in a sinking condition.

Sir Francis Beaufort.

It was generally the men who went on the expeditions themselves who got all the credit, but so much credit is due to Sir Francis Beaufort for the work that he put in while he was Hydrographer from 1829 to 1855 that it is most unfair to omit mention of him. Not only was he an exceedingly clever man himself, but he was endowed with both tact and patience, so that in the end he was enabled to overcome all the arguments which were brought up by interested parties to hamper anything that savoured of progress. He was greatly assisted by being on the Council of the Royal Geographical Society, which brought just the right pressure to bear on the authorities when he needed it most in the furtherance of his plans.

James Clark Ross.

In 1828 it was decided to send another expedition into the Antarctic, and James Clark Ross was appointed. Crozier was his second-in-command, and practically all his officers were well known for polar work. The bomb ketches *Erebus* and *Terror* were given him, and by his vision and extraordinary courage he forced his ships through the polar packs and reached open water and land. He also discovered a sheer cliff of ice 200 feet high extending for many hundreds of miles—the Great Ice Barrier. Next year he forced his way through again, in spite of severe damage to his ship, and examined the Ice Barrier more carefully. In 1843 he surveyed the South Shetlands and finally brought his ships home to receive a well deserved knighthood.

Sir John Franklin.

When James Clark Ross returned from the Antarctic the question of the North-West Passage was revived, and it was suggested to re-commission the *Erebus* and *Terror* and to put them under the command of Commander James Fitzjames. At the last minute Sir John Franklin, who was sixty years of age and really very much too old for the job, put in a claim and it was felt that he could not be disregarded on account of his former work. With a magnificent following the expedition sailed in May, 1845. Tempted by open water, he took a channel which brought him to a dead end against the ice, but he withdrew his ships in safety and got them into winter quarters. Afterwards they met difficulty after difficulty, and finally Sir John Franklin died on June 11th, 1847. Crozier then took command, but he also was much too old for

the work, while Fitzjames had to be content with the subordinate position of captain of the *Erebus*. By then they were very short of stores, but they had to face a third winter, during which they suffered terribly. The preserved meats that had been supplied to the Admiralty by a contractor named Goldner were mostly unfit for human consumption (although one of the tins was found to be perfectly good in 1926), and by the spring of 1848, with their provisions very nearly at an end, it became necessary to abandon the ships and to embark on a march for which they had not the physical strength. An account of what had happened was left in a cairn near Cape Victory, and one by one the men died. The last survivors reached Montreal Island, near the mouth of the Great Fish River, and perished there.

The Search for Franklin.

For a long time nobody had any anxiety as to the fate of Franklin except Dr. King, who had very considerable Arctic experience himself, and who in the winter of 1847 urged the Government to send supplies to Montreal Island. By the irony of fate this was the land that the survivors reached, but the authorities would not listen to him until 1848, when they fitted out the *Enterprise* under Sir James Clark Ross, and the *Investigator* under Captain Edward Bird. Among their officers were Robert McClure and Francis M'Clintock, who were both to become famous later. But the weather was against them, and although Ross and M'Clintock made a long sledge journey, they failed to find anything and returned home. As soon as they got to England, the *Investigator* and *Enterprise* were commissioned again, under the command of McClure and Captain Richard Collinson. They were ordered to proceed by way of Bering Strait. The *Enterprise* was too late and the *Investigator* pushed on most gallantly, but was caught in the ice and was held there from 1850 to 1854. Finally, McClure determined to reach the American coast, but just as his party was about to set out, they were found by the *Resolute* and *Intrepid* which had been sent out by the Admiralty under Sir Edward Belcher. Their success was in no way due to the Commander-in-Chief, who hampered his subordinates, including M'Clintock and Sherard Osborn, shamefully. This was not the only expedition that had gone out in the intervening years, both regular naval and whaling ships having been chartered for the purpose. McClure was rescued from the eastward, so that he had performed the feat of traversing the North-West Passage. Even then their troubles were not over, for Belcher proposed to abandon all his ships without making any proper effort to extricate them, with the result that, in a subsequent court-martial, Kellett was strongly complimented and Belcher's sword was returned to him in significant silence. The experience that these surveyors had obtained in the course of their travels was of the very utmost use to the Navy during the Crimean War.

African Surveys.

During this period popular attention was focussed upon the Arctic

explorers, but some very useful work was done on the African coast. H.M.S. *Leven* was commissioned under Captain William Owen to survey the African coast with the *Barracouta* as tender. This work, especially that carried out in the rivers in boats, was of the most dangerous description and men died of disease and fever like flies. They stuck to their work, however, and they made most valuable surveys, beginning in 1822 and carrying on for about eight years. Meanwhile, Commander Hugh Clapperton, who had entered the Navy by the unromantic path of the Press Gang, had done some exceedingly valuable exploration inland in Africa, accompanied by Richard Lander. Later the Navy helped this work with an expedition up the Niger, under Lieutenant William Allen. Out of 47 men only 9 came back. A second expedition was sent out, and for the third Messrs. Lairds of Birkenhead built the three little steamers *Albert*, *Wilberforce* and *Soudan*. Once again fever took its toll.

The Survey of the South American Coast.

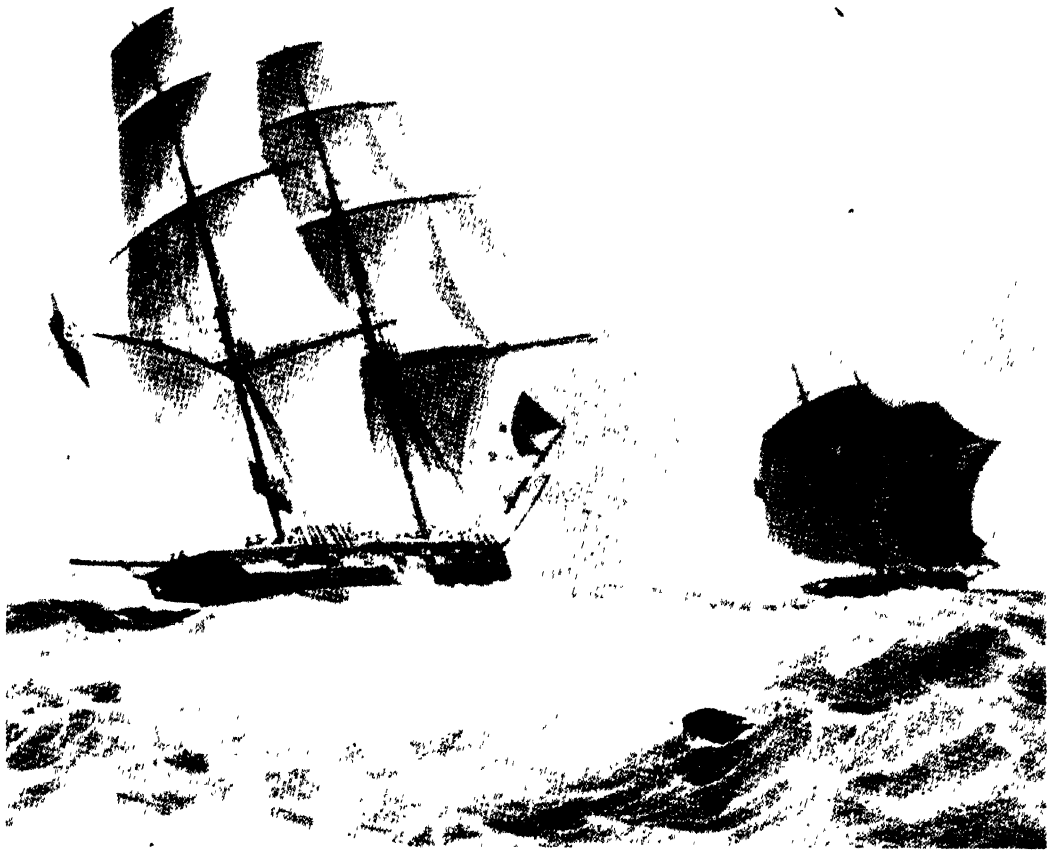
Another job tackled by the British Navy in 1825, was the survey of the Straits of Magellan and the Gulf of Trinidad. Captain Philip Parker King was in command of H.M.S. *Adventure* with the *Beagle* as tender. Lieutenant William Skyring, whose name is perpetuated on the charts of these waters, was a very valuable assistant, although he was very badly treated and relieved of his temporary command by the admiral of the station, in favour of his flag lieutenant, Robert Fitz-Roy. It was a most unpleasant way of doing things, but the Navy gained by the services of a particularly brilliant and keen surveyor. FitzRoy continued in command of the *Beagle*, although he was heavily out of pocket by it, and in his second voyage, which started in 1831, he was accompanied by Charles Darwin, who has left an account of it. Skyring was unfortunately murdered by natives on the West Coast of Africa, but FitzRoy carried on the work and the modern system of meteorological forecasts is practically entirely his work.

Belcher.

Although Captain Edward Belcher cannot be described as an ideal naval officer as he always had his men on the verge of mutiny, he certainly did some exceedingly useful exploratory work. This was mostly in the East and on the coast of Borneo, and had he got the best out of his men he would have done very much more.

American Exploration.

The United States Government had neither the money nor the inclination to spend such large sums on exploration work as the British Navy, but they did some exceedingly useful work. Lieutenant Charles Wilkes, in the *Vincennes*, with the *Peacock*, *Porpoise*, *Relief*, the steamer *Seagull* and the tender *Flying Fish*, in company, sailed in 1828 on a long expedition through the South Pacific, an expedition which provided a great deal of information and covered a huge area, including the South Atlantic and a good deal of the Antarctic Sea.



H.M. 10-GUN BRIG "ACORN," CAPT. JOHN ADAMS, IN
CHASE OF THE PIRATICAL SLAVER "GABRIEL,"
JULY, 1841.

FROM A COLOUR LITHOGRAPH BY T. G. DUTTON AFTER N. M. CONDY
(Lent by Messrs. T. H. Parker)



U.S. TRINITY HOUSE SCHOONER.
(Oil Painting, Artist Unknown)

(Macpherson Collection)

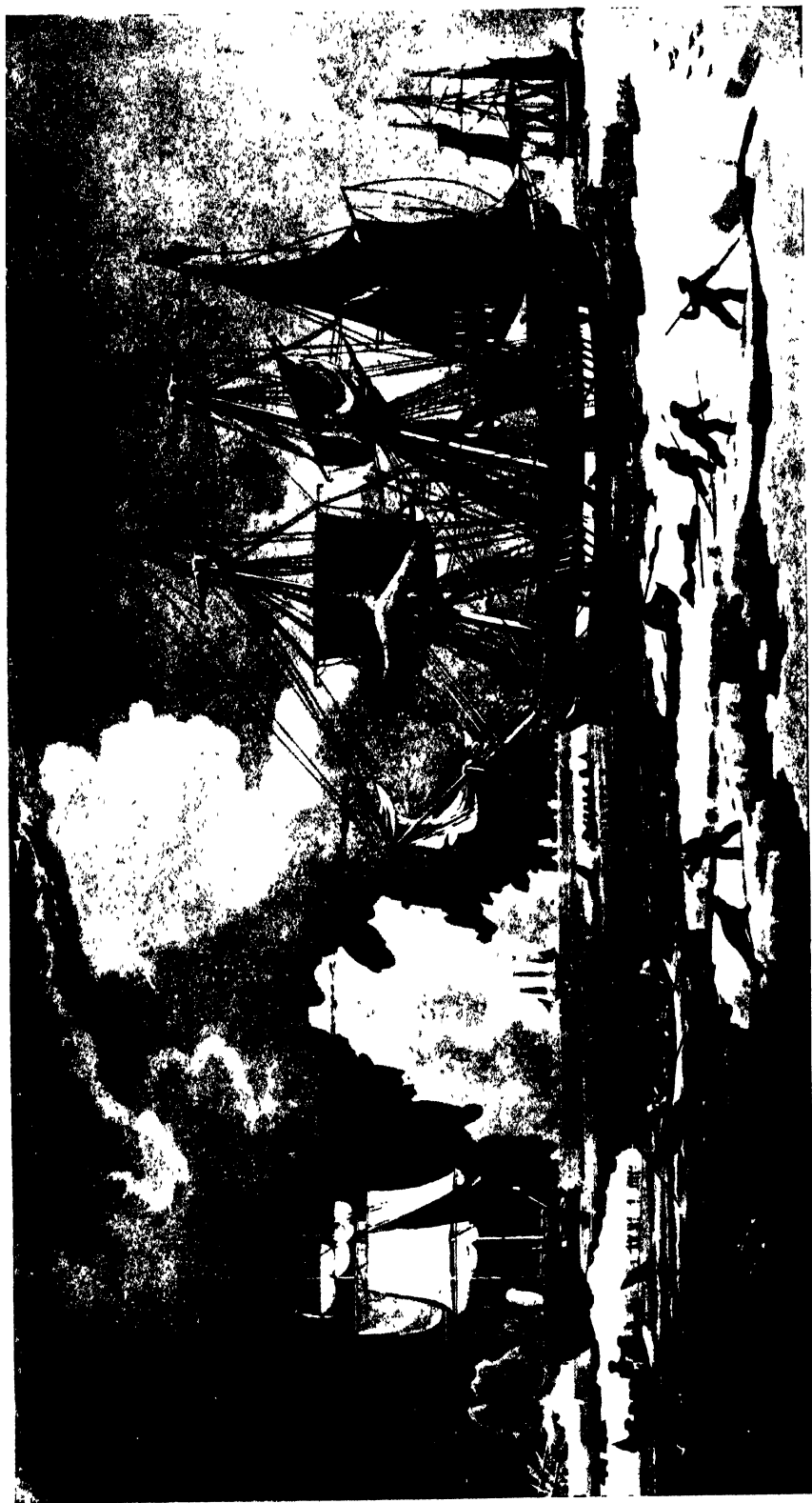
U.S. Trinity House pilot and light schooners were second only to the Navy in smartness and were wonderful little vessels.



WHALE FISHING—HARPOONING A RIGHT WHALE
(FROM AN AQUAVIT, 22 x 31 in., BY JAZET AFTER GARNERFF)

(Macpherson Collection)

The whalers deserve a high place in the records of Polar exploration, in addition to their reputation as magnificent seamen, although their ships were generally veritable hells afloat.



(Macpherson Collection)

THE NORTHERN WHALE FISHERY—THE "HARMONY" OF HULL.
(FROM A COLOUR AQUATINT BY E. DUNCAN AFTER W. J. HUGGINS)

The old-time whaling ships had to be built of extraordinary strength to withstand the strains which were frequently put upon them by the ice.

Grinnell's Arctic Expedition.

In May, 1850, an expedition fitted out by Henry Grinnell, of New York, sailed in search of Sir John Franklin. The specially prepared brigs *Rescue* and *Advance* carried the party. This party encountered great difficulties, but eventually both ships arrived safely home at New York after having added appreciably to Arctic knowledge.

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During the serial publication of this work the author received numerous requests for a bibliography, however short, to assist the reader who has a keen interest in the sea, but who is not a fully fledged student of the subject, to follow up the various points which for lack of space have been only lightly touched upon in the preceding volumes. It was not easy to comply with such a request. A complete bibliography of the sea would occupy a substantial volume, while even the authorities consulted for this work would make a long list. It has therefore been decided to append a short list of books printed in English which carry the various branches of the subject further than has been possible within the limits of this work and which are to be obtained with little or no difficulty.

The author wishes to make it quite clear that this list does not intend to be a complete bibliography of the sea, any more than the work pretends to be a complete history of the biggest subject in the world. Innumerable books essential to the student are omitted because they are not easy to obtain, either new or second-hand. It is merely a guide for those who want to go a little more deeply into the subject. Those who wish to make a close study of the subject are advised to join the Society for Nautical Research.

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